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Public Document

No. 54

The Commonwealth of Massachusetts

ANNUAL REPORT

OF THE

Department of Public Works

For the Year Ending November 30, <sup>1938</sup>~~1933~~



PUBLICATION OF THIS DOCUMENT APPROVED BY THE COMMISSION ON ADMINISTRATION AND FINANCE.

980. 10-'34. No. 2682.

THE COMMONWEALTH OF MASSACHUSETTS

NINETEENTH ANNUAL REPORT  
OF THE  
DEPARTMENT OF PUBLIC WORKS  
YEAR ENDING NOVEMBER 30, 1938

To the Honorable Senate and House of Representatives  
of the Commonwealth of Massachusetts:

I am submitting herewith for the Department of Public Works, a report covering the work and expenditures by the Department for the fiscal year ending November 30, 1938.

This report is compiled from information on file in the Department and contains the type of data customarily furnished in the annual report of the Department as required by the provisions of Law, and is submitted by me as a matter of record.

The organization of the Department as then constituted and the detailed activities of the Department for that fiscal year are presented herewith.

January 1940

JOHN W. BEAL  
Commissioner of Public Works



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The organization of the Department continued as provided in Chapter 297, Acts of 1927, which amended Chapter 16, General Laws, and as provided in Chapter 407, Acts of 1938, the effective date of which was September 7, 1938, which authorized the organization of a Division of Waterways in the Department. Chapter 407 is as follows:

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SECTION 1. Chapter sixteen of the General Laws is hereby amended by inserting after section five, as appearing in the Tercentenary Edition, the following new section: — *Section 5A.* The commissioner shall organize in the department a division of waterways. The commissioner shall, with the approval of the governor, appoint a director to have charge of the work of the division and may, with like approval, remove him. The director shall receive such salary, not exceeding six thousand dollars, as the commissioner may determine, subject to the approval of the governor, and shall devote his entire time to the work of the division.

SECTION 2. Chapter ninety-one of the General Laws is hereby amended by inserting after section nine, as appearing in the Tercentenary Edition, the following new section: — *Section 9A.* The department may adopt a program of construction or reconstruction of piers and other waterfront terminal facilities at any port of the commonwealth after holding hearings, public or private, due notice whereof shall have been given, at which hearings all persons interested may be heard and, if such program relates to the port of Boston, after consulting with and securing the advice and judgment, by report or otherwise, of the Boston Port Authority. After the adoption of any such program, the department is hereby empowered to lay out and construct or reconstruct any particular facilities aforesaid included in such program, to acquire as hereinafter provided any facilities proposed to be reconstructed which are not then owned by the commonwealth, and to execute a contract for the use of any facilities to be constructed or reconstructed hereunder; provided, that no action obligating the commonwealth to any expenditure under this section shall be taken until the department, in the name and on behalf of the commonwealth, shall have executed a written contract, approved by the governor and council, with some responsible party, for the use of the particular facilities proposed to be constructed or reconstructed hereunder, for a term not exceeding forty years and containing provisions for the payment of rental as hereinafter provided, nor unless sufficient funds shall have been made available for such project under a loan authorized by the general court. Prior to executing such a contract for the use of facilities proposed to be constructed or reconstructed at the port of Boston,

the department shall consult with and secure the advice and judgment, by report or otherwise, of the Boston Port Authority relative to the advisability and feasibility of entering into such contract, with special reference to the effect such action may have on the commerce or progress of the port. Every such contract shall provide that the lessee of the facilities shall pay a rental determined by the department to be sufficient to pay all interest charges as they accrue on account of moneys borrowed by the commonwealth and used in the construction or reconstruction of such facilities and for the acquisition of property in connection therewith, and to pay the principal amounts of the money so borrowed and used as they become due and, in addition, to defray so much of the expenses of the department as may in its opinion be properly allocable to the construction or reconstruction of such facilities and the acquisition of property in connection therewith.

Subject to this section, the department, in the name and on behalf of the commonwealth, may take by eminent domain under chapter seventy-nine of the General Laws, or acquire by purchase, lease or otherwise, such property and such rights and easements therein as the department may from time to time consider necessary for the construction or reconstruction of any particular facilities included in a program adopted under this section; and the foregoing shall authorize the commonwealth to acquire in the manner hereinbefore provided any particular pier or other waterfront terminal facility included in any such program, for the purpose of reconstructing the same.

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In accordance therewith, Richard K. Hale, who had been Associate Commissioner since December, 1919, was appointed Director, Division of Waterways, on October 13, 1938; and Paul C. Ryan became Associate Commissioner on the same date. The organization of the Department during the year was as follows:

<u>Commissioner of Public Works</u>	William F. Callahan
<u>Associate Commissioner</u>	Frank L. Kane
<u>Associate Commissioner</u>	Richard K. Hale to October 13, 1938
	Paul C. Ryan beginning October 13, 1938
<u>Director, Division of Waterways</u>	Richard K. Hale beginning October 13, 1938



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## SUMMARY OF WORK OF THE DEPARTMENT

Some of the principal contracts undertaken during the year were as follows: the reconstruction of 4.4 miles of State highway on Route 8, in Becket, between Jacobs Ladder and Becket Center, using bituminous macadam, 24 feet wide; the grading and drainage of 1.2 miles of State highway in new location in Chelmsford, which is the first section of the proposed Boston to Lowell highway, known as the Middlesex Turnpike, to consist of two 34-foot roadways with curbed and grassed median strip, with all important crossroads separated by bridges; reconstruction of 5.7 miles of State highway, Route 38, in Lowell-Tewksbury, including the elimination of the railroad grade crossing at Wamesit; the reconstruction of 3.7 miles of State highway on Route 110, in the city of Methuen, the so-called River Road between Lawrence and Haverhill, 40 feet wide, providing for four lanes of traffic, using bituminous concrete surface on a concrete base; the construction of an additional section (.9 mile) of the proposed north and south highway east of the Connecticut River in Montague and Sunderland, including the replacement of a dangerous underpass with an overhead bridge on new location; the construction of 1.2 miles of State highway in Northfield on Route 10, which, with work recently completed in New Hampshire will provide a new and shorter route between Greenfield and Keene, N.H., the surface being bituminous macadam, 30 feet wide; a new section of State highway, about 1 1/2 miles in length, in the town of Sutton, a part of the new Worcester-Providence highway, with two 30-foot roadways; the construction of a traffic circle at the approach to the North End bridge and about .6 mile of 46-foot bituminous concrete roadway northerly from the circle, including also a section of dike wall along the Connecticut River to assist in preventing floods in West Springfield; the construction of a new bridge in Athol, to replace a narrow and dangerous bridge over the Boston and Maine Railroad at Main Street; the construction of a new bridge in Newburyport to replace an inadequate structure over the Boston and Maine Railroad at High Street; the reconstruction of about half a mile of State highway in Eastham, widening the old road to 40 feet, as part of the reconstruction of the proposed improvement between Orleans and Provincetown; the reconstruction of 1.3 miles of State highway on Route 10 in Easthampton, with bituminous macadam, 30 feet wide, involving also the transplanting of 32 shade trees to obtain the necessary width without destroying the trees; the reconstruction of 1.3 miles of State highway on Route 37 in Braintree and Holbrook, widening a part to 30 feet and the balance to 40 feet.

Another project was the road through Boston and Milton, 2.3 miles of highway along the Neponset River, extending from Blue Hill Avenue Parkway, near Mattapan, southeasterly along the



river, for which land takings were made under a special act of the Legislature. This road is the first section of a route which will be developed in the future from Boston to New York, and will cross the new Providence turnpike in the vicinity of the Norwood-Westwood town line. This highway has two 30-foot roadways separated by a grassed center strip, protected by sloping curbing.

Work was completed on the grading for a section of the proposed Fitchburg by-pass, a distance of about 2 1/2 miles at Fitchburg-Leominster, providing for two 30-foot roadways separated by a dividing strip. This is part of the route to connect with Westminster on the west and with the traffic circle at Concord Junction on the east.

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The rehabilitation of State highways and bridges and the restoration of many bridges on town roads and highways damaged by the September hurricane, floods and tidal wave, were undertaken by the Department. The western part of the State suffered the greatest damage from floods. On the Mohawk Trail route, in the towns of Charlemont, Savoy and Florida, approximately \$1,000,000 ~~were~~<sup>was</sup> spent in restoring sections of State highway which were washed out by the floods, and for protecting these new sections with heavy concrete walls or riprap; also for enlarging the channel of Cold River in order to confine the flood flows within safe bounds.

On the Jacobs Ladder route, through the towns of Russell, Huntington, Chester, Becket and Lee, approximately \$750,000 were spent to restore sections of road destroyed by the flood and in protecting those sections with heavy walls and riprap, and for relocating river channels, or for widening river channels in order to avoid, if possible, further damage to the highways.

On the Berkshire trail route, in the towns of Williamsburg, Goshen and Cummington, work was started which was estimated to cost about \$250,000 to restore sections of the road which were washed out by the flood and for channel excavation to prevent further washouts; also for building a dike in the town of West Cummington, in order to prevent any further damage to the village of West Cummington.

Under the provisions of Chapter 500, Acts of 1938, the Department issued approvals as to location and necessity of highway projects to be undertaken by cities and towns, with funds (totaling \$5,000,000) distributed to them under said act. The purpose of these funds, distributed from the diverted Gasoline Tax and Highway Funds, was to enable the cities and towns to carry out local highway projects for the purpose of alleviating existing conditions resulting from unemployment. After the September hurricane and flood, the Department authorized the cities and towns to use all or a portion of these funds for the rehabilitation of roads, streets and highways, repair of sidewalks, curbing and bridges damaged by the storm of September 21 and for the removal of highway trees damaged by the storm, when requests for approval for such work were submitted. During the year the Department approved as to location and necessity highway projects in 102 cities and towns to the amount of \$769,000. The Department also approved highway projects for the repair of damage caused by the hurricane and flood of September, 1938, in 193 cities and towns to the amount of \$1,050,000.

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The bridge program carried out by the Department during the year included the regular State highway bridge program and the construction of bridges on city and town highways under the provisions of Chapter 90. Two major bridges were completed across the Connecticut River; namely, the Turners' Falls bridge and the Deerfield-Sunderland bridge. The former is 1750 feet long and spans the river, canal and adjacent railroad; it is the longest bridge ever built by the Department. The Deerfield-Sunderland bridge measures 1050 feet in length.

Farther down the river at Northampton-Hadley, the Calvin Coolidge Memorial bridge is nearing completion. This is one of the few bridges that honors the memory of a past President of the United States.

Since September 21 the Department was faced with a program of replacing and repairing bridges damaged or destroyed by the flood and hurricane.

About 10 per cent of the highway bridges on State, county and municipal highways were destroyed; and in certain towns, particularly Colrain, Charlemont, Buckland and Hawley, the destruction of bridges was so general that these communities were isolated and helpless as a result of this sudden catastrophe.

In order to carry out a program of rehabilitation of highways and bridges, enabling legislation was passed at the Special Session of the General Court providing for funds to undertake such work.

In addition to the usual work of maintenance of State highways, the Department carried out repairs and replacement made necessary by the damage from the series of severe storms in July and, later, by the September hurricane and flood.

The winter maintenance of highways, plowing snow and sanding icy highways, covered 1982 miles of highway, including 1771 miles of State highway and 211 miles of town roads.

Numerous harbor and channel improvements were made during the year. In Boston Harbor the dredging of channels in cooperation with the Federal Government in deepening the main ship channel and in dredging Weymouth Fore River has continued; also, dredging channels in Malden River, Neponset River, and Weir River; and basins at Jeffries Point, East Boston, and at Crow Point, Hingham. Outside of Boston Harbor shore protection work and dredging have been carried on at many locations. The new Gloucester Fish Pier was completed and fully equipped for operation.



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The engineering and clerical staff of the Department was as follows:

Chief Engineer,	George H. Delano
Assistant Project Engineer,	(Projects), Philip H. Kitfield
Highway Engineer,	(Construction, State Highways)
	Raymond W. Coburn
Highway Engineer,	(Construction, Chapter 90 roads)
	William F. Donovan
Highway Engineer,	(Maintenance), James E. Lawrence
Highway Engineer,	(Traffic), Edgar F. Copell
Bridge Engineer,	George E. Harkness

(Districts Until May 25, 1938)

District Highway Engineers:-

District 1, George A. Curtis - Berkshire County and the towns of Worthington, Middlefield and Huntington in Hampshire County, and the towns of Chester, Montgomery, Russell, Blandford and Tolland in Hampden County.

District 2, W. G. Burns - Franklin, Hampshire and Hampden Counties, with the following exceptions; three towns in Hampshire County included in District No. 1 and ten towns in Hampden County included in Districts Nos. 1 and 3.

District 3, M. J. Dalton - Worcester County and the towns of Brimfield, Holland, Monson, Palmer and Wales in Hampden County.

District 4, F. D. Sabin - Middlesex County

District 5, Joseph A. McCarthy - Essex and Suffolk Counties.

District 6, H. O. Parker - Norfolk and Bristol Counties.

District 7, John E. Troy - Plymouth, Barnstable, Dukes and Nantucket Counties.

(Districts After May 25, 1938)

District 1 - The cities and towns of Berkshire County and the towns of Huntington, Middlefield and Worthington in Hampshire County, and the towns of Blandford, Chester, Montgomery, Russell and Tolland in Hampden County.

District 2 - The cities and towns of Franklin County; the cities and towns of Hampshire County except the towns of Huntington, Middlefield and Worthington; the cities and towns of Hampden County, except the towns of Blandford, Brimfield, Chester, Holland, Monson, Montgomery, Palmer, Russell, Tolland and Wales.

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- District 3 - The cities and towns of Worcester County (including the town of Harvard) and the towns of  
Brimfield, Holland, Monson, Palmer and Wales in  
Hampden County.
- District 4 - The cities and towns of Middlesex County, (including the cities of Malden and Melrose), the towns  
of Wellesley and Brookline in Norfolk County; the  
town of Harvard in Worcester County; and the city  
of Boston in Suffolk County.
- District 5 - The cities and towns of Essex County; the cities  
of Malden and Melrose in Middlesex County; the  
town of Winthrop and the cities of Chelsea,  
Revere and Boston in Suffolk County.
- District 6 - The cities and towns of Norfolk County, except  
the town of Cohasset; the cities and towns of  
Bristol County; the city of Brockton in Plymouth  
County and the city of Boston in Suffolk County.
- District 7 - The cities and towns of Plymouth County (including the city of Brockton); the town of Cohasset  
in Norfolk County and the towns of Barnstable,  
Dukes and Nantucket Counties.

The waterway activities of the Department are included in Districts  
4, 5, 6 and 7.

District Waterways Engineer, for Boston Harbor - John N. Ferguson  
District Waterways Engineer, for harbors and waterways outside  
Boston Harbor - Francis L. Sellew  
Secretary - Mary A. Riley  
Department Business Agent - Fred Fair

#### REGISTRY OF MOTOR VEHICLES

Registrar - Frank A. Goodwin  
Deputy Registrar - Anthony A. Bonzagni  
Assistant to the Registrar of Motor Vehicles - Alfred W. Devine  
Chief Administrative Clerk - Charles R. Gilley  
Chief Inspector of Motor Vehicles - Albert S. Olsson

A detailed report of the activities of the Department for the year  
is presented herewith.

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SPECIAL REPORTS TO THE LEGISLATURE.

The Department was authorized and directed by the Legislature to make certain investigations, and the reports thereon were made as follows:

Relative to certain proposed highway and other traffic improvements in the Commonwealth and related matters. Report made November 30, 1937 by the Department of Public Works under Chapter 24, Resolves of 1937 (H. 240 of 1938).

Relative to certain harbor improvements in the Commonwealth. Report made November 30, 1937 by the Department of Public Works under Chapter 69, Resolves of 1937 (H. 210 of 1938).

Improving conditions at "Musquashiat Pond" in the town of Scituate. Joint report made November 29, 1937 by Department of Public Works and the Department of Public Health under Chapter 13, Resolves of 1937 (H. 264 of 1938).

Relative to the advisability of increasing the facilities of the State Pier at New Bedford. Report made January 4, 1938 by the Department of Public Works under Chapter 74, Resolves of 1937 (H. 373 of 1938).



## RECOMMENDATIONS FOR LEGISLATION

The Commissioner of Public Works presented to the State Secretary on December 1, 1938, as required by law, that part of the current annual report which contains recommendations or suggestions for legislative action as follows:

1. In order that a small discrepancy in the accounts of the Registry of Motor Vehicles may be adjusted, covering a period of three years, during which time more than thirty-six millions of dollars have been handled by many employees, some of whom, by necessity during rush periods, are temporarily assigned to the Registry and its twenty branch offices, it is recommended that legislation be passed to provide for such adjustment.
2. The present motor vehicle laws require that two number plates be furnished for trailers, as well as for motor vehicles. Obviously, there is no purpose in attaching a number plate to the front of a trailer, and in view of the fact that for several years only one such plate has been manufactured and issued, it is recommended that the present laws be amended to be in accord with this practice.
3. The motor vehicle laws now provide in Section 3, Chapter 90, General Laws, that the Registry shall issue permits to non-residents for the use of motor vehicles within this State beyond the period of time established. A large number of such permits are issued annually, but it is evident that no particular value results from this practice. It is recommended that the law shall be amended to make it unnecessary to issue such permits. Such a change would not in any way affect the rights and privileges of non-residents, nor would it lessen the insurance requirements at present provided for the protection of pedestrians upon the highways. The non-resident, remaining over a certain time, under the proposed legislation, will, as at present, be required to have insurance and will be required to submit his insurance policy or a certificate from his insurance company presenting evidence of his insurance contract.



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356 1938 APPROPRIATIONS

Chapter 162, Acts of 1934, making appropriations for the maintenance of departments, boards, commissions, institutions and certain activities of the Commonwealth, etc., is, in part, as follows:—

Item

*Requirements for Extinguishing the State Debt*

- 226 For sinking fund requirements and for certain serial bonds maturing during the present year, the sum of five million five hundred sixty-three thousand six hundred thirty-one dollars and eighty-three cents, of which sum five million fifty-four thousand two hundred ninety-eight dollars and fifty cents shall be paid from the Highway Fund \$5,563,631 83

*Interest on the Public Debt.*

- 227 For the payment of interest on the direct debt of the commonwealth, a sum not exceeding seven hundred twenty-five thousand five hundred sixty dollars and eighty-three cents, of which sum four hundred forty-nine thousand three hundred thirty-eight dollars and seventy-five cents shall be paid from the Highway Fund \$725,560 83

*Service of the Department of Banking and Insurance.*

*Division of Insurance:*

- ~~319 For the salary of the commissioner, a sum not exceeding six thousand dollars \$6,000 00~~
- 320 For other personal services of the division, including expenses of the board of appeal and certain other costs of supervising motor vehicle liability insurance, a sum not exceeding two hundred fifty-eight thousand five hundred dollars, of which sum not more than thirty-five thousand dollars may be charged to the Highway Fund 258,500 00

*Service of the Department of Corporations and Taxation.*

*Corporations and Tax Divisions:*

- 326 For the salaries of certain positions filled by the commissioner, with the approval of the governor and council, and for additional clerical and other assistance, a sum not exceeding two hundred fifty-one thousand dollars, of which sum not more than fifty thousand dollars may be charged to the Highway Fund to cover the estimated cost of collection of the gasoline tax, so called, and not more than fifty thousand dollars may be payable from fees collected under section twenty-seven of chapter one hundred and thirty-eight of the General Laws, as amended, to cover the estimated cost of collection of alcoholic beverages taxes, so called \$251,000 00

*Service of the Department of Public Safety.*

*Division of State Police:*

- 626 For the salaries of officers, including detectives, a sum not exceeding five hundred sixty-five thousand two hundred and fifty dollars, of which sum not more than two hundred thousand dollars may be charged to the Highway Fund 565,250 00
- ~~627 For personal services of civilian employees, a sum not exceeding one hundred thirteen thousand two hundred dollars \$13,200 00~~
- 628 For other necessary expenses of the uniformed division, including traveling expenses of detectives, a sum not exceeding four hundred twenty-eight thousand dollars, of which sum not more than one hundred fifty thousand dollars may be charged to the Highway Fund 428,000 00

*Service of the Department of Public Works.*

The appropriations made in the following four items are to be paid three quarters from the Highway Fund and one quarter from Port of Boston receipts:

- |     |  |             |
|-----|--|-------------|
| 644 | For the salaries of the commissioner and the associate commissioners, a sum not exceeding nineteen thousand five hundred dollars | \$19,500 00 |
| 645 | For personal services of clerks and assistants to the commissioner, a sum not exceeding ninety-four hundred and ten dollars      | 9,410 00    |
| 646 | For traveling expenses of the commissioners, a sum not exceeding two thousand dollars  | 2,000 00    |
| 647 | For telephone service in the public works building, a sum not exceeding twenty-nine thousand four hundred and ninety dollars     | 29,490 00   |

~~11111~~ ~~29,490 00~~

Functions of the department relating to highways (the following appropriations, except as otherwise provided, are made from the Highway Fund):

- |      |  |             |
|------|--|-------------|
| 648a | For personal services for the maintenance and operation of the public works building, a sum not exceeding eighty-two thousand one hundred dollars  | \$82,100 00 |
| 648b | For other expenses for the maintenance and operation of the public works building, a sum not exceeding fifty-one thousand four hundred dollars   | 51,400 00   |
| 649  | For the salaries of guards for the public works building, including expense of uniforms, a sum not exceeding thirty-one thousand six hundred and twenty dollars  | 31,620 00   |
| 650  | For personal services of the chief engineer, engineers and office assistants, including certain clerks and stenographers, a sum not exceeding one hundred thousand seven hundred and forty dollars   | 100,740 00  |
| 651  | For services other than personal, including printing pamphlet of laws and the annual report, and necessary office supplies and equipment, and for the expense of membership of the department in the American Association of State Highway Officials, a sum not exceeding seventeen thousand dollars | \$17,000 00 |

- |     |   |              |
|-----|---|--------------|
| 652 | For the suppression of gypsy and brown tail moths on state highways, a sum not exceeding twelve thousand five hundred dollars   | 12,500 00    |
| 653 | For the construction and repair of town and county ways, a sum not exceeding two million seven hundred thousand dollars, the same to be in addition to any amount heretofore appropriated for the purpose   | 2,700,000 00 |
| 654 | For aiding towns in the repair and improvement of public ways, a sum not exceeding one million four hundred and seventy-five thousand dollars, the same to be in addition to any amount heretofore appropriated for the purpose   | 1,475,000 00 |
| 655 | For the maintenance and repair of state highways, including care of snow on highways and expenses of traffic signs and lights, for payment of damages caused by defects in state highways with the approval of the attorney general, for care and repair of road-building machinery, and for the maintenance of a nursery for roadside planting, a sum not exceeding three million one hundred fifty thousand dollars, the same to be in addition to any amount heretofore appropriated for the purpose | 3,150,000 00 |
| 656 | For the purpose of enabling the department of public works to secure federal aid for the construction and reconstruction of highways, including bridges, a sum not exceeding two million six hundred seventy-five thousand dollars, the same to be in addition to any amount heretofore appropriated for the purpose  | 2,675,000 00 |
| 657 | For administering the law relative to advertising signs near highways, a sum not exceeding twenty-five thousand dollars, to be paid from the General Fund   | 25,000 00    |
| 658 | For expenses of a topographical survey and map of the commonwealth, in addition to funds received from federal appropriations or private subscriptions, a sum not exceeding fifty thousand dollars  | 50,000 00    |



Registration of Motor Vehicles:		
659	For personal services, a sum not exceeding one million one hundred ten thousand dollars, of which sum fifteen thousand dollars may be charged to the General Fund, and the remainder shall be paid from the Highway Fund	1,110,000 00
660	For services other than personal, including traveling expenses, purchase of necessary supplies and materials, including cartage and storage of the same, and for work incidental to the registration and licensing of owners and operators of motor vehicles, a sum not exceeding five hundred thirteen thousand dollars, to be paid from the Highway Fund	513,000 00
661	For printing and other expenses necessary in connection with publicity for certain safety work, a sum not exceeding one thousand dollars, to be paid from the Highway Fund	1,000 00
Functions of the department relating to waterways and public lands:		
662	For personal services of the chief engineer and assistants, a sum not exceeding fifty-eight thousand dollars	\$58,000 00
663	For services other than personal, including printing pamphlet of laws and the annual report, and for necessary office and engineering supplies and equipment, a sum not exceeding sixteen hundred dollars	1,600 00
664	For the care and maintenance of the province lands and of the lands acquired and structures erected by the Provincetown tercentenary commission, a sum not exceeding seven thousand dollars	7,000 00
665	For the maintenance of structures, and for repairing damages along the coast line or river banks of the commonwealth, and for the removal of wrecks and other obstructions from tidewaters and great ponds, a sum not exceeding twenty thousand dollars	20,000 00
666	For the improvement, development and protection of rivers and harbors, tidewaters and foreshores within the commonwealth, as authorized by section eleven of chapter ninety-one of the General Laws, as appearing in the Tercentenary Edition thereof, and of great ponds, a sum not exceeding one hundred thousand dollars, and any unexpended balance of the appropriation remaining at the end of the current fiscal year may be expended in the succeeding fiscal year for the same purposes; provided, that all expenditures shall be upon condition that at least fifty per cent of the cost is covered by contributions from municipalities or other organizations and individuals, except that in the case of dredging channels for harbor improvements at least twenty-five per cent of the cost shall be so covered	100,000 00
667	For re-establishing and permanently marking certain triangulation points and sections, as required by order of the land court in accordance with section thirty-three of chapter ninety-one of the General Laws, as appearing in the Tercentenary Edition thereof, a sum not exceeding one thousand dollars	1,000 00
668	For expenses of surveying certain town boundaries, by the department of public works, a sum not exceeding five hundred dollars	500 00
668a	For expenses of re-establishing and defining a portion of the boundary line between the towns of Edgartown and Oak Bluffs, a sum not exceeding one thousand dollars	1,000 00
669	For the operation and maintenance of the New Bedford state pier, a sum not exceeding thirteen thousand dollars	13,000 00
670	For the compensation of dumping inspectors, a sum not exceeding one thousand dollars	1,000 00
671	For continuing the work in gauging the flow of water in the streams of the commonwealth, a sum not exceeding five thousand dollars	5,000 00
672	For the maintenance and repair of certain property in the town of Plymouth, a sum not exceeding four thousand dollars	4,000 00
673	For the operation and maintenance of the Cape Cod Canal pier, a sum not exceeding fifty-two hundred dollars	5,200 00

- 674a For dredging at or near the public town wharf at Provincetown, a sum not exceeding four thousand dollars, the same to be in addition to any amount heretofore appropriated therefor

\$4,000 00

~~XXXX~~

~~722,350 00~~

Functions of the department relating to Port of Boston (the following items are to be paid from the Port of Boston receipts):

- |     |  |            |
|-----|--|------------|
| 675 | For the construction of railroads and piers and for the development of certain land, a sum not exceeding nine thousand dollars   | \$9,000 00 |
| 676 | For the supervision and operation of commonwealth pier five, including the salaries or other compensation of employees, and for the repair and replacement of equipment and other property, a sum not exceeding one hundred twenty-three thousand five hundred dollars | 123,500 00 |
| 677 | For the maintenance of pier one, at East Boston, a sum not exceeding six thousand dollars  | 6,000 00   |
| 678 | For the maintenance and improvement of commonwealth property under the control of the department in connection with its functions relating to waterways and public lands, a sum not exceeding ninety thousand dollars  | 90,000 00  |
| 679 | For dredging channels and filling flats, a sum not exceeding ninety thousand dollars, the same to be in addition to any unexpended balance of the appropriation made for the purpose in the previous year  | 90,000 00  |
| 680 | For the cost of inspection of structures in tidewater within Boston harbor, a sum not exceeding three thousand dollars, the same to be in addition to any amount heretofore appropriated for the purpose   | 3,000 00   |

*Miscellaneous.*

- ~~1699~~ For the maintenance of Bunker Hill monument and the property adjacent, to be expended by the metropolitan district commission, a sum not exceeding seventeen thousand six hundred dollars

~~\$17,600 00~~

The following items are to be paid from the Highway Fund, with the approval of the metropolitan district commission:

- |      |  |            |
|------|--|------------|
| 700  | For maintenance of boulevards and parkways including installation of traffic lights, a sum not exceeding seven hundred forty-three thousand one hundred and thirty-five dollars  | 743,135 00 |
| 701  | For resurfacing of boulevards and parkways, a sum not exceeding two hundred seventy-five thousand dollars, the same to be in addition to any unexpended balance of the appropriation made for the purpose in the previous year       | 275,000 00 |
| 701a | For repairs and replacements in the structure of the Neponset river bridge, a sum not exceeding one hundred twenty-five thousand dollars   | 125,000 00 |
| 702  | For expense of supplies and services necessary for procuring Works Progress Administration funds, a sum not exceeding twenty-four thousand dollars, the same to be in addition to any amount heretofore appropriated for the purpose | 24,000 00  |
| 703  | For the cost of installations necessary for additional street lighting, a sum not exceeding twenty thousand dollars  | 20,000 00  |
| 704  | For the construction of a certain drainage system near Riverside avenue in the city of Medford, a sum not exceeding four thousand dollars  | 4,000 00   |
| 705  | For maintenance of Wellington bridge, a sum not exceeding thirty-four hundred dollars  | 3,400 00   |



B

Unclassified Accounts and Claims.

For certain other aid:

- 711 For the compensation of certain public employees for injuries sustained in the course of their employment, for present and previous years, as provided by section sixty-nine of chapter one hundred and fifty-two of the General Laws, as amended, a sum not exceeding one hundred thousand dollars, of which sum not more than fifty-five thousand dollars may be charged to the Highway Fund. \$100,000 00

SECTION 3. No liabilities in excess of appropriations provided for under this act shall be incurred by any department or institution, except in cases of emergency, and then only upon the prior written approval of the governor and council. ~~The state comptroller is hereby directed to send~~

SECTION 4. No payment shall be made or obligation incurred under authority of any special appropriation made by this act for construction of public buildings or other improvements at state institutions until plans and specifications have been approved by the governor, unless otherwise provided by such rules and regulations as the governor may make.

SECTION 5. No expenses incurred for mid-day meals by state employees, other than those who receive as part of their compensation a non-cash allowance in the form of full or complete boarding and housing, and those employees who are stationed beyond commuting distance from their homes for a period of more than twenty-four hours, shall be allowed by the commonwealth.

# SUPPLEMENTARY APPROPRIATIONS

Chapter 497, Acts of 1936, in addition to the general appropriation act making appropriations to supplement certain items contained therein, and for certain new activities and projects, is, in part, as follows:—

SECTION 1. To provide for supplementing certain items in the general appropriation act, and for certain new activities and projects, the sums set forth in section two, for the particular purposes and subject to the conditions stated therein, are hereby appropriated from the general fund or ordinary revenue of the commonwealth, unless some other source of revenue is expressed, subject to the provisions of law regulating the disbursement of public funds and the approval thereof.

## SECTION 2.

### Service of the Department of Banking and Insurance.

#### Division of Insurance:

~~For other personal services of the Division, including expenses of the board of appeal and other costs of supervising motor vehicle liability insurance, a sum not exceeding fourteen thousand five hundred dollars, the same to be in addition to any amount heretofore appropriated for the purpose.~~

Item 321 For other services, including printing the annual report, traveling expenses, necessary office supplies and equipment, and rent of offices, a sum not exceeding two thousand dollars, the same to be in addition to any amount heretofore appropriated for the purpose and to be paid from the Highway Fund 2,000 00

### Service of the Department of Public Works.

Functions of the department relating to highways (the following appropriations, except as otherwise provided, are made from the Highway Fund):

648a	For personal services for the maintenance and operation of the public works building, a sum not exceeding eighteen hundred and seventy-six dollars, the same to be in addition to any amount heretofore appropriated for the purpose	\$1,876 00
648b	For other expenses for the maintenance and operation of the public works building, a sum not exceeding eight hundred dollars, the same to be in addition to any amount heretofore appropriated for the purpose	800 00
649	For the salaries of guards for the public works building, including expense of uniforms, a sum not exceeding seven hundred and thirty dollars, the same to be in addition to any amount heretofore appropriated for the purpose	730 00
650	For personal services of the chief engineer, engineers and office assistants, including certain clerks and stenographers, a sum not exceeding seven hundred dollars, the same to be in addition to any amount heretofore appropriated for the purpose	700 00
655	For the maintenance and repair of state highways, including care of snow on highways and expenses of traffic signs and lights, for payment of damages caused by defects in state highways with the approval of the attorney general, for care and repair of road-building machinery, and for the maintenance of a nursery for roadside planting, a sum not exceeding fifty-eight hundred and seventy-five dollars, the same to be in addition to any amount heretofore appropriated for the purpose	\$5,875 00
656a	(Report on this item made in separate bill.)	
656b	For land damages and other expenses in connection with the laying out and construction of a section of highway in Boston and Brookline under the provisions of chapter four hundred and twenty of the acts of nineteen hundred and thirty, as amended, a sum not exceeding twenty thousand dollars, the same to be in addition to any amount heretofore appropriated for the purpose	20,000 00
657	For administering the law relative to advertising signs near highways, a sum not exceeding three thousand dollars, the same to be in addition to any amount heretofore appropriated for the purpose, and to be paid from the general fund	3,000 00
658	For expenses of a topographical survey and map of the commonwealth, in addition to funds received from federal appropriations or private subscriptions, a sum not exceeding ten thousand dollars, and all money appropriated under this item for	



- 20  
D
- Registration of Motor Vehicles:
- 659 For personal services, a sum not exceeding five thousand dollars, the same to be paid from the Highway Fund and to be in addition to any amount heretofore appropriated for the purpose 5,000 00
- 660 For services other than personal, including traveling expenses, purchase of necessary supplies and materials, including cartage and storage of the same, and for work incidental to the registration and licensing of owners and operators of motor vehicles, a sum not exceeding fifteen hundred dollars, the same to be paid from the Highway Fund and to be in addition to any amount heretofore appropriated for the purpose 1,500 00

Functions of the department relating to waterways and public lands:

- 662 For personal services of the director, chief engineer and assistants, a sum not exceeding fifteen hundred and sixty dollars, the same to be in addition to any amount heretofore appropriated for the purpose 1,560 00
- 668 For expenses of surveying certain town boundaries, by the department of public works, a sum not exceeding five hundred dollars, the same to be in addition to any amount heretofore appropriated for the purpose 500 00
- 674b For certain dredging in Scituate Harbor, subject to the conditions imposed by chapter four hundred and six of the acts of the present year, a sum not exceeding seventy-two thousand six hundred dollars, the same to be in addition to any other funds made available for the purpose 72,600 00
- 674c For the construction of a sea wall at Quincy, subject to the conditions imposed by chapter four hundred and nine of the acts of the present year, a sum not exceeding sixteen thousand dollars, the same to be in addition to any other funds made available for the purpose 16,000 00
- 674d For certain dredging in Fairhaven Harbor, subject to the conditions imposed by chapter forty-two of the resolves of the present year, a sum not exceeding ten thousand two hundred dollars, the same to be in addition to any other funds made available for the purpose \$10,200 00
- 674e For the purchase of certain property adjacent to the New Bedford state pier, as authorized by chapter four hundred and twenty of the acts of the present year, a sum not exceeding fifty thousand dollars 50,000 00
- 674f For certain dredging of the Weir river in the town of Hull, subject to the conditions imposed by chapter four hundred and seventy-one of the acts of the present year, a sum not exceeding forty-six thousand nine hundred dollars, the same to be in addition to any other funds made available for the purpose 46,900 00
- 674g For the dredging of an anchorage basin and the extension of a stone jetty in Witchmere harbor in the town of Harwich, a sum not exceeding sixty-seven thousand dollars, the same to be in addition to any funds made available for the purpose by the Federal government 67,000 00
- 674h For dredging in Nantucket Harbor, a sum not exceeding five thousand dollars, which sum is hereby made available at such time as the town of Nantucket pays into the state treasury an equal sum of five thousand dollars 5,000 00

Functions of the department relating to Port of Boston (the following items are to be paid from the Port of Boston receipts):

- 676 For the supervision and operation of commonwealth pier five, including the salaries or other compensation of employees, and for the repair and replacement of equipment and other property, a sum not exceeding fifty-five hundred and fifty dollars, the same to be in addition to any amount heretofore appropriated for the purpose 5,550 00
- 678 For the maintenance and improvement of commonwealth property under the control of the department in connection with its functions relating to waterways and public lands, a sum not exceeding ten thousand dollars, the same to be in addition to any amount heretofore appropriated for the purpose 10,000 00



- The following items are to be paid from the Highway Fund, with the approval of the metropolitan district commission:
- 700 For maintenance of boulevards and parkways including installation of traffic lights, a sum not exceeding four thousand and ninety-two dollars, the same to be in addition to any amount heretofore appropriated for the purpose 4,092 00
- 701b (Report on this item made in separate bill.)
- 704a For the construction of an underpass at Columbia Circle in the city of Boston, a sum not exceeding sixty-five thousand dollars 65,000 00
- 704b For the construction of a traffic circle at West Roxbury Parkway and Center street, in the city of Boston, a sum not exceeding sixty thousand dollars 60,000 00
- 704c For the reconstruction of a certain bridge in the city of Revere by the metropolitan district commission, as authorized by chapter four hundred and seventy-two of the acts of the present year, a sum not exceeding seventeen thousand four hundred dollars, the same to be paid from the Highway Fund and to be in addition to other funds made available by said chapter four hundred and seventy-two 17,400 00

*Unclassified Accounts and Claims.*

- 717 For the payment of claims authorized by certain resolves of the current year, a sum not exceeding forty-one thousand eleven dollars and eighty-six cents, of which amount thirty-seven hundred and sixty dollars shall be paid from the Highway Fund. Said payments shall be certified by the comptroller of the commonwealth only upon the filing of satisfactory releases or other evidence that the payments are accepted as full compensation on the part of the commonwealth in respect thereto \$41,011 86
- 717a For reimbursing the town of Colrain for expenditures on account of the reconstruction of a certain bridge, as authorized by chapter four hundred and seventy-four of the acts of the present year, the sum of ninety-five hundred fifty dollars and five cents, the same to be paid from the Highway Fund 9,550 05

## DEFICIENCIES

For deficiencies in certain appropriations of previous years, in certain items, as follows:

*Service of the Department of Public Works.*

- For the suppression of gypsy and brown tail moths on state highways, the sum of one hundred thirty-three dollars and twenty cents, to be paid from the Highway Fund . . . . . \$133 20
- Registration of Motor Vehicles:  
For services other than personal, including traveling expenses, purchase of necessary supplies and materials, including cartage and storage of the same, and for work incidental to the registration and licensing of owners and operators of motor vehicles, the sum of two hundred and forty dollars, to be paid from the Highway Fund . . . . . 240 00

SECTION 3. The following amendments and transfers are hereby authorized in appropriations previously made:

*Department of Public Works.*

Chapter four hundred and twenty-nine of the acts of nineteen hundred and thirty-six, providing for repair or reconstruction of certain bridges damaged by recent floods, is hereby amended by striking out section eight inserted by section three of chapter four hundred and thirty-four of the acts of nineteen hundred and thirty-seven, and inserting in place thereof the following:

Section 8. The comptroller is hereby authorized to certify for payment liabilities incurred by the department in anticipation of the receipts of the assessments to be made in nineteen hundred and thirty-nine on certain cities, towns and counties, as authorized by this act.

Said chapter four hundred and twenty-nine is further amended by striking out section four and inserting in place thereof the following:

Section 4. The amounts to be paid by cities and towns as aforesaid shall be assessed and collected by the state treasurer as a part of their state tax in the year nineteen hundred and thirty-nine.

SECTION 4. No payment shall be made or obligation incurred under authority of any special appropriation made by this act for construction of public buildings or other improvements at state institutions until plans and specifications have been approved by the governor, unless otherwise



AN ACT MAKING ADDITIONAL APPROPRIATIONS TO CARRY OUT A PUBLIC WORKS PROGRAM FOR THE PURPOSE OF ALLEVIATING EXISTING CONDITIONS RESULTING FROM UNEMPLOYMENT AND PROVIDING FOR THE PAYMENT BY THE COMMONWEALTH TO ITS MUNICIPALITIES OF A PORTION OF THE HIGHWAY FUND.

Whereas, The deferred operation of this act would tend to defeat its purpose, therefore it is hereby declared to be an emergency law, necessary for the immediate preservation of the public convenience.

Be it enacted, etc., as follows:

SECTION 1. To provide for the employment of additional labor and for other personal services and expenses as a measure of relief during the present emergency caused by unemployment, the sums set forth in section two, for the several purposes therein specified, are hereby appropriated from the Highway Fund, subject to the provisions of law regulating the disbursement of public funds and the approval thereof.

SECTION 2.

*Service of the Department of Public Works.*

Item		
A	For the construction and repair of town and county ways, a sum not exceeding five hundred thousand dollars, the same to be in addition to any amount heretofore appropriated for the purpose	\$500,000 00
B	For the maintenance and repair of state highways, exclusive of such maintenance and repair thereof as shall be carried out as Works Progress Administration projects, a sum not exceeding eight hundred thousand dollars, the same to be in addition to any amount heretofore appropriated for the purpose	800,000 00
C	For the reconstruction and repair of state highways, which reconstruction and repair thereof shall be only such as shall be carried out as Works Progress Administration projects, a sum not exceeding five hundred thousand dollars, the same to be in addition to any amount heretofore appropriated for the purpose	500,000 00
D	For the purpose of enabling the department of public works to secure federal aid for the construction and reconstruction of highways, including bridges, a sum not exceeding seven hundred and fifty thousand dollars, the same to be in addition to any amount heretofore appropriated for the purpose	750,000 00
E	For the payment of damages for property acquired in connection with the carrying out of the provisions of Item D, the sum of two hundred thousand dollars	200,000 00

*Service of the Metropolitan District Commission.*

F	For the construction, reconstruction, repair and maintenance of boulevards and roadways within the jurisdiction of the metropolitan district commission, a sum not exceeding two hundred and fifty thousand dollars, the same to be in addition to any sum heretofore appropriated therefor; provided, that none of the expenses incurred under this item shall be assessed upon the cities and towns comprising the metropolitan parks district	\$250,000 00
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Total . . . . . \$3,000,000 00

SECTION 3. Any authorization for expenditure under item F of section two for maintenance of boulevards and roadways shall be held to authorize expenditure for maintenance of such roads, roadways, parkways and bridges under the jurisdiction of the metropolitan district commission as are surfaced with macadam or other hard material and open to motor vehicular traffic, whether constructed under general or special law within or without a reservation or open space, and however the costs of maintenance of any such road, roadway, parkway or bridge may otherwise be required to be paid or assessed.

SECTION 4. The department of public works or the metropolitan district commission, as the case may be, shall have full authority to carry out negotiations, and enter into agreements relative to work authorized to be carried out by it hereunder, with the appropriate agencies of the federal government if deemed advisable by it. The commonwealth may accept and use for the purposes of this act any grant of federal funds, and such grants shall be in addition to any other funds available for such purposes.



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6

*From Highway Fund*  
~~OTHER APPROPRIATIONS FROM HIGHWAY FUND~~

Chap. 498 AN ACT PROVIDING FOR THE PAYMENT BY THE COMMONWEALTH TO ITS MUNICIPALITIES OF A PORTION OF THE HIGHWAY FUND TO ENABLE THEM TO CARRY OUT LOCAL HIGHWAY PROJECTS FOR THE PURPOSE OF ALLEVIATING EXISTING CONDITIONS RESULTING FROM UNEMPLOYMENT, AND PROVIDING FOR THE RECONSTRUCTION AND REPAIR OF CERTAIN HIGHWAYS AND BRIDGES DAMAGED BY THE RECENT STORM.

Whereas, The deferred operation of this act would tend to defeat its purpose, therefore it is hereby declared to be an emergency law, necessary for the immediate preservation of the public convenience.

*Be it enacted, etc., as follows:*

SECTION 1. (Disapproved by the governor by message to the house of representatives filed July 27, 1938. Objections of governor sustained by vote of the house of representatives July 27, 1938.)

SECTION 2. (Disapproved by the governor by message to the house of representatives filed July 27, 1938. Objections of governor sustained by vote of the house of representatives July 27, 1938.)

SECTION 3. For the purpose of repairing the damage to public ways in the commonwealth caused by the recent storm, there shall also be available for expenditure by the state department of public works and certain cities and towns, without further appropriation, from the Highway Fund, such amounts as shall be determined by said emergency finance board, as hereinafter provided, but not exceeding, in the aggregate, five hundred thousand dollars. Any sums made available for expenditure by the state department of public works under this section shall be expended by it, together with federal funds, if any, allocated to the commonwealth and available for such expenditure, for the purpose of repairing or reconstructing state highways, including surface drainage, sidewalks, curbing and bridges, so damaged; and any sum received by a city or town under this section shall be placed in a separate fund and shall, under the direction of the local highway department, be expended, without appropriation, together with federal funds, if any, allocated to such city or town and available for such expenditure, for the purpose of repairing or reconstructing local highways, including surface drainage, sidewalks, curbing and bridges, so damaged.

SECTION 4. Projects to be entered into under authority of section three of this act shall be submitted to said emergency finance board, in the case of state highways by the commissioner of public works and in case of local highways by the mayor and city council in the case of cities or by the selectmen in the case of towns, and no project shall be entered into under said section three unless it is approved, with respect to the necessity and location thereof, by said board. The decision of said board shall be final.

SECTION 5. Persons employed for work on any project entered into under authority of this act shall not be subject to the civil service laws or the rules and regulations made thereunder.

*Approved July 27, 1938.*



Chap. 500 AN ACT PROVIDING FOR THE PAYMENT BY THE COMMON-WEALTH TO ITS MUNICIPALITIES OF A PORTION OF THE HIGHWAY FUND TO ENABLE THEM TO CARRY OUT LOCAL HIGHWAY PROJECTS FOR THE PURPOSE OF ALLEVIATING EXISTING CONDITIONS RESULTING FROM UNEMPLOYMENT.

Whereas, The deferred operation of this act would tend to defeat its purpose, therefore it is hereby declared to be an emergency law, necessary for the immediate preservation of the public convenience.

Be it enacted, etc., as follows:

SECTION 1. There shall be paid, without further appropriation, from the Highway Fund, as soon as may be to the several cities and towns, the sum of five million dollars, in proportion to the amounts for which they shall have been respectively assessed for the state tax of the current year. The sum received by each city and town under this section shall be placed in a separate fund and shall, under the direction of the local highway department, be expended, without appropriation, together with federal funds, if any, allocated to such city or town and available for such expenditure, in the current year or thereafter as hereinafter provided for local highway projects including construction, maintenance and repair of local roads, streets and highways other than state highways, surface drainage, sidewalks, curbs and bridges.

SECTION 2. Projects to be entered into under authority of this act shall be submitted to the state department of public works by the mayor and city council in the case of cities and by the selectmen in the case of towns, and no project shall be entered into hereunder unless it is approved, with respect to the necessity and location thereof, by said department of public works. A city or town aggrieved by the action of said department of public works in refusing to approve a project submitted to it as aforesaid or by the failure of said department to act in the matter of the approval of the project within a period of thirty days after it has been submitted to it, may appeal therefrom to the emergency finance board, established under section one of chapter forty-nine of the acts of nineteen hundred and thirty-three, and the decision of said emergency finance board shall be final. Upon written request of the mayor and city council of a city or the selectmen of a town said department of public works shall furnish engineering services with respect to any project or projects to be entered into by such city or town hereunder; provided, that the cost of such engineering services, with respect to any such project, shall not exceed ten per cent of so much of the total cost thereof as is to be met from the sum paid to such city or town under section one.

The amount of the expense of such engineering services shall be paid to the state treasurer by the city or town to which such services shall have been furnished from the sum paid to such city or town under said section one, and shall be available, without appropriation, for the payment of the expense incurred by said department of public works for said services, subject otherwise to the provisions of law regulating the disbursement of public funds and the approval thereof.

SECTION 3. Persons employed for work on any project entered into under authority of this act shall not be subject to the civil service laws or the rules and regulations made thereunder.

Approved August 22, 1938.

## [CHAP. 505]

## AN ACT PROVIDING FUNDS FOR HIGHWAY WORK MADE NECESSARY BY THE RECENT HURRICANE AND FLOODS.

Whereas, The deferred operation of this act would tend to defeat its purpose, therefore it is hereby declared to be an emergency law, necessary for the immediate preservation of the public health, safety and convenience.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

SECTION 1. To provide for highway work made necessary by the recent hurricane and floods, the sums set forth in section two of this act, for the several purposes and subject to the conditions therein specified, are hereby made available from the receipts from the sale of bonds, notes or other forms of written acknowledgment of debt, as authorized by section three, subject to the provisions of law regulating the disbursement of public funds and the approval thereof.

## SECTION 2.

## Item

- |  |                |
|--|----------------|
| A. For the construction, reconstruction and repair of town and county ways, a sum not exceeding eight million seven hundred and fifty thousand dollars, out of which all liabilities incurred on account of the hurricane and flood emergency by the department of public works for any of the purposes set forth in item six hundred and fifty-three of chapter three hundred and fifty-six of the acts of nineteen hundred and thirty-eight, under authority of prior written approval of the governor and council, shall be met | \$8,750,000 00 |
| B. For the maintenance, reconstruction and repair of state highways, a sum not exceeding five million five hundred thousand dollars, out of which all liabilities incurred on account of the hurricane and flood emergency by the department of public works for any of the purposes set forth in item six hundred and fifty-five of chapter three hundred and fifty-six of the acts of nineteen hundred and thirty-eight, under authority of prior written approval of the governor and council, shall be met                     | 5,500,000 00   |

SECTION 3. For the purposes of this act, the state treasurer, upon the request of the commissioner of public works, shall borrow on the credit of the commonwealth such sums, not

exceeding, for work specified in Items A and B, respectively, of section two, the amount authorized hereby to be expended therefor, and not exceeding, in the aggregate, fourteen million, two hundred and fifty thousand dollars, as may from time to time be required and shall issue in one or more series bonds, notes or other forms of written acknowledgment of debt, hereinafter referred to as obligations. Each series shall carry such rates of interest as the state treasurer may fix, with the approval of the governor, and shall be payable serially in such amounts and at such times as the state treasurer may determine, with the approval of the governor; provided, that the principal payments of each series shall be made annually in amounts as nearly equal as may be. The obligation last payable of any series issued hereunder shall become due not later than five years from the date of the obligations of such series.

All obligations issued under this act shall be signed by the state treasurer and approved by the governor.

All interest payments and payments on account of principal on such obligations shall be paid from the Highway Fund; provided, that, notwithstanding the foregoing, such obligations shall be general obligations of the commonwealth.

SECTION 4. Contracts for the hire of motor trucks for use in carrying out work authorized by this act shall be made by the department of public works only with the owners of such trucks and payments for the hire of such trucks shall be made directly to said owners.

Enacted October 28, 1938.







## [CHAP. 507]

## AN ACT PROVIDING FUNDS FOR ADDITIONAL EMERGENCY WORK MADE NECESSARY BY THE RECENT HURRICANE AND FLOODS.

Whereas, The deferred operation of this act would tend to defeat its purpose, therefore it is hereby declared to be an emergency law, necessary for the immediate preservation of the public health, safety and convenience.

Be it enacted, etc., as follows:

## PART I.

SECTION 1. To provide for the repair, reconstruction and replacement of buildings and other property, including the removal of fallen trees, under the control of state departments hereinafter specified made necessary by the recent hurricane and floods, the sums set forth in section two of Part I of this act, for the several purposes and subject to the conditions therein specified, are hereby made available from the receipts from the sale of bonds, notes or other forms of written acknowledgment of debt, as authorized by section four of said Part I, subject to the provisions of law regulating the disbursement of public funds and the approval thereof.

SECTION 2. *in part as follows :*

*Item*

## Service of Department of Public Works.

665a Waterways, outside of the Port of Boston	143,000 00
678a Waterways, within the Port of Boston	18,000 00

SECTION 4. For the purposes of Part I of this act, the state treasurer, upon the request of the department heads having charge of the work authorized by section two of Part I of this act, shall borrow on the credit of the commonwealth such sums, not exceeding, for work specified in the respective items of said section two, the amount authorized hereby to be expended therefor, and not exceeding, in the aggregate, three million, four hundred thirty-two thousand, four hundred and fifteen dollars, as may from time to time be required and shall issue in one or more series bonds, notes or other forms of written acknowledgment of debt, hereinafter referred to as obligations. Each series shall carry such rates of interest as the state treasurer may fix, with the approval of the governor, and shall be payable serially in such amounts and at such times as the state treasurer may determine, with the approval of the governor; provided, that the principal payments of each series shall be made annually in amounts as nearly equal as may be. The obligation last payable of any series issued hereunder shall become due not later than five years from the date of the obligations of such series.

All obligations issued under Part I of this act shall be signed by the state treasurer and approved by the governor.

All interest payments and payments on account of principal on such obligations shall be paid from the general fund or ordinary revenue of the commonwealth.

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RESOLVE

[CHAP. 92]

RESOLVE PROVIDING FOR A STUDY AND INVESTIGATION BY  
A SPECIAL COMMISSION OF MATTERS RELATING TO THE  
RECENT HURRICANE AND FLOODS.

*Whereas*, The General Court, deeply mindful of the recent disaster which caused great loss of life and damage to property throughout the commonwealth, has received from His Excellency the Governor a report of the Massachusetts Emergency Relief Commission, so called, a body created by the governor and council to act during the emergency; and

*Whereas*, Said report contains certain recommendations which require the most sympathetic and careful consideration; and

*Whereas*, Many further problems, financial or otherwise, pertaining to the disaster may be deserving of consideration by the session of the General Court which assembles in January, and a preliminary study thereof might expedite legislative action thereon; therefore be it

*Resolved*, That an unpaid special commission, to consist of three members of the senate to be designated by the president thereof, seven members of the house of representatives to be designated by the speaker thereof, three persons to be appointed by the governor, and also the adjutant general, the commissioner of public works and the chairman of the commission on administration and finance, comprising said Massachusetts Emergency Relief Commission, is hereby established for the purpose of making a thorough study of the recommendations contained in the report of said Massachusetts Emergency Relief Commission, and also to investigate and consider all matters relating to flood control and rehabilitation of industries with respect to which legislative action may be deemed necessary or advisable. The commission created by this resolve shall be provided with quarters in the state house or elsewhere, shall hold such hearings in the state house or elsewhere as it may deem expedient, may expend for expenses the sum of five thousand dollars, which sum is hereby appropriated from the general fund or revenue of the commonwealth, and shall report to the general court the results of its study and investigation, and its recommendations, together with drafts of legislation necessary to carry its recommendations into effect, by filing the same with the clerk of the house of representatives on or before the third Wednesday of January in the year nineteen hundred and thirty-nine.

Approved October 28, 1938.



FINANCIAL STATEMENTS  
Summary of Income, Year Ending November 30, 1938

Highway Fund

( Section 34, Chapter 90, General Laws, as amended )  
( See Chapter 288, Acts of 1925 )

Fees (for registration of motor vehicles, licenses to operate, etc.), and fines (penalties, Sundry Courts), net receipts. . . . .	6,768,485.93	
Gasoline Tax, net . . . . .	21,601,851.09	
Contributions for highways and assessments (G.L.Ch.81) . . . . .	35,911.79	
Appropriation balances of previous years reverting . . . . .	100,949.43	
Contributions and Refunds . . . . .	2,468.48	
Sale of old materials and buildings . . . . .	1,957.18	
Reimbursement for repairs to guard rail and other property. . . . .	8,118.64	
Rent of property (Nursery) . . . . .	180.00	
Rent of Space, Public Works Building . . . . .	42,644.05	
Mending Machine Receipts . . . . .	214.90	
Accrued Interest on Bonds issued . . . . .	4,156.25	
Premium . . . . .	27,345.75	
Boulevard Receipts Highway Fund share . . . . .	773.05	\$28,595,056.54

Port of Boston Fund  
(Chapter 91, General Laws)

Rents (leases and permits) . . . . .	142,817.28	
Reimbursement for services (inspection of dumping dredged material in Boston Harbor) . . . . .	1,015.40	
Use of Commonwealth Pier 5 (wharfage, dockage, rentals, etc.) . . . . .	157,929.95	
Use of Commonwealth Pier 1 (rentals, etc.) . . . . .	3,339.04	
Revenue from permits for dumping dredged material at receiving Basins . . . . .	1,910.40	
License charges (for tidewater displacement and occupying Commonwealth tide lands (Boston Harbor) . . . . .	4,313.00	
Telephone Pay Station receipts . . . . .	292.56	
Sale of land . . . . .	36,400.00	
Refunds . . . . .	26.13	
Appropriation balances of previous years reverting . . . . .	3,549.68	351,593.44

Department Income  
(Ordinary Revenue)

Sales (specifications and plans for contracts) . . . . .	1,347.00	
License charges (for tidewater displacement and occupying Commonwealth tide lands) outside of Boston Harbor . . . . .	3,013.98	
Certified Copying charges . . . . .	127.00	
Sale of Atlas sheets and miscellaneous plans . . . . .	1,059.84	
Use of Province Lands (S.25, c.91, G.L.) . . . . .	496.50	
Permits for advertising signs . . . . .	27,251.26	
Use of New Bedford State Pier . . . . .	17,102.43	
Use of Cape Cod Canal Pier . . . . .	3,039.25	
Sale of Maps . . . . .	120.91	
Use of Plymouth State Pier . . . . .	89.17	53,647.34



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Improvement of Rivers and Harbors Trust  
(Sections 11, 29 Chapter 91, General Laws)

Contributions from towns, individuals or others ..... \$ 86,600.00

Highway Trust  
(Section 30, Chapter 81, General Laws)

Federal Aid (reimbursement from United States Government) ..... 3,422,594.75

Funds contributed for Work under Special Acts

Contributions (Chapter 433 Acts 1936) Central Bridge Lowell:

City of Lowell	\$5,000.00	
County of Middlesex	5,000.00	
Federal Aid-PWA 1361D	<u>88,750.00</u>	98,750.00

Contribution by County of Dukes-Chapter 464 Class 2 Acts of 1935.. 1,214.96  
(Edgartown-Oak Bluffs)

Reimbursement from Federal Government-PWA Docket-1286D-Hull ..... 16,715.00

Total ..... \$32,626,172.03

EXPENDITURES

The expenditures by the Department under the provisions of General Laws and other acts and the appropriation acts, chapters 356 and 497, Acts of 1938, during the fiscal year ending November 30, 1938 were as follows:

Administrative

Commissioner, Associate Commissioners, Personal Services of clerks, stenographers, and Commissioners' Travel .....	\$29,982.20	
Public Works Building, operation and maintenance..	131,634.71	
" " " expenses	49,853.63	
" " " Personal services	<u>81,781.08</u>	
Salaries of Guards .....	32,067.52	
Telephone Service .....	24,805.40	\$ 218,489.83

Total

19  
RELATING TO HIGHWAYS

<u>PERSONAL SERVICES</u> --Chief Engineer, Clerks and Stenographers			98,683.57
<u>STATE HIGHWAYS</u> --Construction (Chapter 81, G.L.)			
General contract work	2,502,392.64		
Engineering (supervision)	802,558.10		
Materials testing Laboratory	7,094.31		
Detour and route maps	1,132.62		
Geodetic survey	111.95		
U.S. Highway Planning survey	115,865.63		
Planning survey (materials)	2,588.79		
Fore River Bridge:			
Substructure	8,360.00		
Superstructure	<u>13,311.52</u>	<u>21,671.52</u>	3,453,415.56
<u>MAINTENANCE AND REPAIR OF STATE HIGHWAYS</u> (Chapter 81, General Laws)			
<u>ORDINARY MAINTENANCE</u>			
General Maintenance	1,200,118.07		
Engineering supervision	299,965.11		
Flood Maintenance	449,302.32		
Engineering supervision	22,405.94		
Materials Testing Laboratory	13,028.14		
Machinery and Motor Vehicles	796,765.43		
Removal of snow from highways	1,251,990.01		
Road planting and development	55,767.80		
Traffic engineering, signs, and traffic count	236,287.15		
Paint manufacture	25,341.48		
Newburyport Bridge, Salisbury, Newburyport, over Merrimac River, maintenance and operation	7,554.19		
Brightman Street Bridge, Fall River-Somerset, maintenance and operation	15,104.14		
New Bedford-Fairhaven Bridge, Acushnet River, maintenance and operation	16,451.70		
Slades Ferry Bridge, Fall River, Somerset and Swansea, operation and maintenance	2,494.81		
Quincy-Weymouth Bridge, maintenance and operation	20,441.95		
Detour and route maps	580.22		
Geodetic survey	3,697.48		
Tractor repairs	14,241.76		
Technical services	<u>361.25</u>		4,431,898.95
<u>CONSTRUCTION OF TOWN AND COUNTY WAYS</u> (Section 34, Chapter 90, G.L.)			
State's expenditures for work contracted for in cities and towns	1,809,631.73		
PWA Docket--Hull	42,990.39		
Slades Ferry Bridge	191,189.24		
Engineering and expense (supervision)	642,541.18		
Materials testing Laboratory	10,927.46		
Inspection Bituminous concrete pavement	<u>15,155.79</u>		2,712,435.79



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At Long Towns In The Repair And Improvement  
Of Public Ways (Sec. 26, Chapter 81, G.L.)

State's expenditures for work contracted for in cities and towns	1,154,668.55	
Engineering and expense (supervision)	125,816.22	
Materials testing laboratory	10,308.83	1,290,793.60
<u>Emergency Public Works Construction</u>		81,563.43
<u>Incidentals, (rental of business machines, printing, postage, supplies, etc.)</u>		16,177.53
<u>Advertising signs, regulation of personal services and expenses</u>		27,882.51
<u>SPECIAL ACTS</u>		
<u>Abolition of Grade Crossings, (Chapter 417, Acts of 1930)</u>		5,064.17
<u>Alewife Brook Parkway Extension (Chapter 302 Acts of 1932)</u>		9,143.92
<u>Reconstruction of Ocean Ave. Revere (Chapters 375, Acts of 1934 and 487 Acts of 1935)</u>		15,433.68
<u>Certain Land Damages in connection with State Highway Work Chapter 464 Acts of 1935-Bond Issue</u>		80,176.75
Class 2 Construction of Sidewalks	9,114.08	
Class 3 Hayden-Cartwright Act	414,562.19	
Class 4 Grade Crossings, etc.	1,992,798.59	2,416,474.86
<u>Chapter 186 Acts of 1936 State Highway Flood Damage</u>		10,413.63
<u>Chapter 429 Acts of 1936-Construction Certain Bridges</u>		541,383.59
<u>Chapter 433 Acts of 1936-Central Bridge Lowell, PWA Docket 1361D</u>		295,274.35
<u>Chapter 494 Acts of 1938-Reconstruction and Repair State Highways WPA</u>		186,916.87
<u>Chapter 498 Acts of 1938-Repairing Storm Damage</u>		191,590.75
<u>Chapter 505 Acts of 1938-Hurricane and Flood Damage (Bond Issue (A) Town and County Ways)</u>		972,234.06
<u>Chapter 505 Acts of 1938-Hurricane and Flood Damage (Bond Issue (B) State Highways)</u>		1,543,877.72
<u>Chapter 500 Acts of 1938 Payments to cities and towns for Highway Work</u>		5,000,000.00
<u>Chapter 474 Acts of 1938 Reimbursement to Town of Colrain</u>		9,550.05
<u>Topographical survey and maps</u>		48,431.41
<u>Suppression of Gypsy and Brown-tail moths on State Highways in cities and towns</u>		12,477.21

Total Expenditures For Highways

\$23,451,293.96



SUMMARY OF EXPENDITURES RELATING TO WATERWAYS

FISCAL YEAR ENDING-November 30, 1938

General Expenses \$ 60,670.95

BOSTON HARBOR:

Dredging and Filling	74,626.50
Maintenance and Operation of Commonwealth Pier 5, South Boston	117,203.46
Maintenance and Operation of Commonwealth Pier 1, East Boston	5,807.11
Maintenance of Property	100,822.33
Streets, Piers and Railroads	9,000.00
Structures in Tidewater, Boston Harbor, Inspection of	3,086.43
Town River, Quincy (Chap. 419, Acts of 1937)	136,920.00
Weir River, Hull (Chap. 471, Acts of 1938)	81,394.37

OUTSIDE BOSTON HARBOR:

Cape Cod Canal Pier, Operation and Maintenance	4,580.84
Compensation of Dumping Inspectors	146.91
Cuttyhunk Harbor, Gosnold (Chap. 29-Resolves of 1937)	19,500.00
Edgartown Harbor, Edgartown (Chap. 27-Resolves of 1937)	10,000.00
Fairhaven Harbor, Fairhaven (Chap. 42, Resolves of 1938)	20,400.00
Gloucester Fish Pier construction	730,752.60
Housatonic River, Pittsfield (Chap. 413 Acts of 1935 flood control	4,964.75
Hurricane and Flood Damage (Chap. 507, Acts of 1938)	17,237.09
Improvement of Rivers and Harbors	177,443.90
New Bedford Pier, operation and maintenance	16,119.78
Plymouth Property, expenses of	3,226.55
Province Lands, expenses of	6,940.00
Provincetown Harbor, dredging (Chap. 434, Acts of 1937) (Chap. 356, Acts of 1938 )	7,999.96
Repairing Damages to shore	17,778.66
Roughans Point, Revere, seawall (Chap. 358, Acts of 1936)	15,398.96
Scituate Harbor improvement (Chap. 406, Acts of 1938)	34,901.06
Stream Gauging	1,096.38
Topographical Survey	607.16
Town Boundaries, surveying	645.68
Town Boundary, Edgartown-Oak Bluffs, reestablishing	503.68
W P A grants, expenses in connection with	11.55
Witchmere Harbor, Harwich (PWA Docket 1382-F)	320.35

Total

\$ 1,680,107 .01

## EXPENDITURES RELATING TO THE REGISTRY OF MOTOR VEHICLES

Cost of running the Registry of Motor Vehicles \$1,605,156.87

### SUMMARY OF EXPENDITURES BY DEPARTMENT For Year Ending November 30, 1938

Administrative	218,489.83
Relating to Highways	23,451,293.96
Registry of Motor Vehicles	1,605,156.87
Relating to Waterways	1,679,907.01
<u>Total</u>	<u>\$26,954,847.67</u>

### CO-OPERATIVE WORK-SUPERVISION OF EXPENDITURES.

The Department has supervised the expenditures during the year by cities, towns and counties, under Chapter 81, General Laws, as amended, of approximately \$2,675,889.21 for co-operative work, in repairing, maintaining and improving certain public ways, and for other road work for which the towns and cities made contributions. All such work was carried out in conformity with contracts, specifications and plans approved by the Department.

The Resurfacing or Reconstruction of State Highways in 1938 was divided into types as follows:

0.640 Miles of Bituminous Macadam  
8.350 Miles of Bituminous Concrete  
0.010 Miles of Reinforced Concrete

SURVEYS, PLANS AND ESTIMATES. During the year ending November 30, 1938, surveys, plans and estimates were made as follows:

FOR STATE HIGHWAY CONSTRUCTION. Reconnaissance surveys and plans in 2 cities and 5 towns, 9.74 miles; reconnaissance estimates in 4 cities and 6 towns, 24.028 miles; preliminary surveys in 6 cities and 17 towns, 30.875 miles; preliminary plans in 5 cities and 17 towns, 24.395 miles; preliminary estimates in 4 cities and 14 towns, 19.025 miles; lines and grades in 5 cities and 17 towns, 21.846 miles; and final surveys in 1 cities and 1 towns, 5.932 miles.



## RELATING TO HIGHWAYS

### GENERAL STATEMENT

STATE HIGHWAYS. During the year ending November 30, 1938, the Department has laid out new State Highways amounting to 5.273 miles in 8 towns. Under Chapter 81, General Laws, as amended by Chapter 427, Acts of 1931, 8.357 miles of State Highways were discontinued or abandoned. The total length of State Highways at the end of the year was 1891.164 miles.

HIGHWAYS CONSTRUCTED IN 1938. Construction has been completed on 4.778 miles of State Highway, and 111.972 miles of highway under the provisions of Section 34, Chapter 90, General Laws, as amended, and 4.322 miles of highway under the provisions of Special Acts, making a total of 121.072 miles completed during the year.

Of the above highways completed this year, the classification according to type of pavement is as follows:

- 17.371 Miles of Bituminous Macadam
- 50.002 Miles of Bituminous Concrete
- 2.645 Miles of Penolithic
- 12.686 Miles of Gravel
- 7.746 Miles of Gravel with Bituminous Treatment
- 0.325 Mile of Reinforced Concrete
- 30.297 Miles of Bituminous Concrete (Mixed in Place)

RESURFACING, RECONSTRUCTION AND WIDENING OF HIGHWAYS. During the year 21.123 miles of highway were widened but not resurfaced, and 5.123 miles of State Highway were resurfaced or reconstructed and widened. In addition to this work on which the surfacing has been completed, there are several miles of road in various stages of completion which are scheduled to be finished next year.

The Resurfacing or Reconstruction of State Highways in 1938 was divided into types as follows:

- 0.640 Miles of Bituminous Macadam
- 4.386 Miles of Bituminous Concrete
- 0.056 Miles of Reinforced Concrete

SURVEYS, PLANS AND ESTIMATES. During the year ending November 30, 1938, surveys, plans and estimates were made as follows:

FOR STATE HIGHWAY CONSTRUCTION. Reconnaissance surveys and plans in 2 cities and 5 towns, 9.34 miles; reconnaissance estimates in 4 cities and 6 towns, 28.028 miles; preliminary surveys in 6 cities and 13 towns, 20.875 miles; preliminary plans in 5 cities and 17 towns, 24.896 miles; preliminary estimates in 4 cities and 14 towns, 19.098 miles; lines and grades in 5 cities and 17 towns, 21.836 miles; and final surveys in 3 cities and 3 towns, 5.992 miles.



FOR STATE HIGHWAY RECONSTRUCTION. Reconnaissance surveys and plans in 2 towns, 5.9 miles; reconnaissance estimates in 1 city and 1 town, 4.632 miles; preliminary surveys in 4 cities and 17 towns, 28.931 miles; preliminary plans in 4 cities and 18 towns, 33.843 miles; preliminary estimates in 3 cities and 4 towns, 11.190 miles; lines and grades in 3 cities and 4 towns, 11.190 miles; and final surveys in 1 city and 4 towns, 6.549 miles.

FOR STATE HIGHWAY MAINTENANCE. Preliminary surveys in 3 towns, 2.642 miles; preliminary plans in 3 towns, 2.642 miles; and final surveys in 2 towns, 0.182 miles.

UNDER SECTION 34, CHAPTER 90, GENERAL LAWS, AS AMENDED. Reconnaissance surveys and plans in 8 towns, 6.8 miles; preliminary surveys in 20 cities and 170 towns, 168.90 miles; preliminary plans in 24 cities and 189 towns, 129.006 miles; preliminary estimates in 33 cities and 274 towns, 229.153 miles; lines and grades in 30 cities and 166 towns, 123.886 miles; and final surveys in 15 cities and 55 towns, 49.222 miles.

Maintenance. Preliminary surveys in 2 cities and 8 towns, 3.163 miles; preliminary plans in 1 city and 4 towns, 0.947 miles, and preliminary estimates in 34 towns, 29.346 miles.

UNDER THE PROVISIONS OF VARIOUS ACTS AND RESOLVES, surveys, plans, estimates, lines and grades, and final surveys were made as follows:

- Chapter 433, Acts of 1936: 0.213 miles of final survey in 1 city.
- Chapter 429, Acts of 1936: 3.672 miles of final surveys in 19 towns.
- Chapter 505, Acts of 1938, Section 2: Item A-9.1 miles of preliminary surveys in 25 towns; preliminary plans in 25 towns, 9.1 miles; and preliminary estimates in 4 towns, 1.5 miles.
- Chapter 505, Acts of 1938, Section 2: Item B-6.32 miles of preliminary surveys in 1 city and 25 towns; preliminary plans in 1 city and 25 towns, 6.32 miles.

PRECISE LEVELS, TRIANGULATION, AND TRAVERSES. During the year the Massachusetts Geodetic Survey, which is a Works Progress Administration project sponsored by the Massachusetts Department of Public Works, has made level, traverse, and triangulation surveys, and has established bench marks, traverse and triangulation stations as follows:

- 331 Miles of first order levels and 765 miles of second order levels were completed in 103 cities and towns.
- 1379 Bench Marks were established.
- 800 Square miles of triangulation, including 164 permanent triangulation stations in 154 cities and towns.
- 313 Miles of traverses, including 902 permanent traverse stations in 47 cities and towns.



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TOWN AND CITY MAPS. 83 new maps were drawn. 82 maps were redrawn.

PERMITS. There were 950 permits issued during the year for opening or occupying State Highways for various purposes.

ENGINEERING ADVICE TO OTHER DEPARTMENTS. Advice to Department of Mental Health: preliminary estimate in 1 town, 0.148 miles; lines and grades in 1 town, 0.148 miles; and final survey in 1 town, 0.152 miles.

ENGINEERING ADVICE TO MUNICIPAL AUTHORITIES. The Department furnished engineering advice without charge to 19 cities and towns in accordance with the provisions of Section 1, Chapter 81, General Laws.

APPROVAL OF SPECIFICATIONS. The Department approved during the year under provisions of Section 7, Chapter 44, General Laws, as amended, specifications for the construction of roads in 5 cities and towns.

Planting of trees on State highways. During the past year 4588 trees and 20 vines were planted along roadsides. In addition there were planted 936 shrubs, all being provided by the State nursery.

## PETITIONS, MEETINGS AND HEARINGS.

In addition to the regular weekly meetings of the Department throughout the year, numerous hearings and conferences have been held, including the annual hearings in the several counties in the Commonwealth for the open discussion of questions relating to the public ways, as required by section 1, chapter 81, General Laws; appeals from the action taken by the Registrar of Motor Vehicles in the suspension or revocation of certain licenses to operate motor vehicles in 198 cases; on the matter of outdoor advertising in various towns and cities; on the matter of special regulations for motor vehicles in Everett and Lancaster; on the matter of laying out State highways in the towns of Chelmsford, Danvers, West Springfield, Sutton, Northfield, Milton, Montague, Sunderland and Fitchburg under the provisions of Chapter 218 of the Acts of 1937; on the matter of the elimination of grade crossings in Buckland, Ipswich and Orange; and relative to rules and regulations to be made by the Department with respect to airports, landing fields and landing strips.

Petitions were received and contracts signed during the year as follows:

	<u>Petitions</u>	<u>Contracts</u>
State highways	--	24
Work under section 34, chapter 90, General Laws	--	592
Work under section 26, chapter 81, General Laws	180	180
Chapter 505, Item A, Acts of 1938,	--	145
Chapter 505, Item B, Acts of 1938,	--	71
Chapter 506, Acts of 1938	--	6
Elimination of Grade Crossings	--	1
Miscellaneous	--	28
Total	<u>180</u>	<u>1047</u>



and RECONSTRUCTION  
CONSTRUCTION/OF STATE HIGHWAYS

(Chapter 81, General Laws, as amended)

The following contracts were entered into during the year for the construction of State highways, and work incidental thereto, in various municipalities:-

Swampscott

~~December~~ 28, 1937, contract made with C. & R. Construction Co., of Boston, for reconstructing a deck plate girder bridge with creosoted lumber floor, and approaches thereto, over Paradise Road, under the Boston and Maine Railroad, the surface consisting of bituminous macadam. The proposal amounted to \$35,632.80. Work completed November 4, 1938. Expenditure during 1938, \$31,929.55.

Concord

~~January~~ 25, 1938, contract made with M. McDonough Corp., of Saugus, for constructing a traffic circle and approaches on Elm Street, the surface around the traffic circle consisting of standard cement concrete surfacing with an inner strip of Class I bituminous concrete and an outer shoulder of standard bituminous macadam, and the surface of the approaches consisting of bituminous macadam. The proposal amounted to \$54,499.50. Work completed August 20, 1938. Expenditure during 1938, \$46,297.81

Lawrence

~~February~~ 1, 1938, contract made with Coleman Bros. Corporation, of Boston, for constructing an extension to a concrete beam bridge on Winthrop Avenue, over the Shawsheen River, and reconstructing about 1,050 feet of State highway on the same road, the surface consisting of Class I bituminous concrete. The proposal amounted to \$26,281.75. Work completed on July 11, 1938. ~~Work completed~~ Expenditure during 1938, \$28,273.43.

West Springfield

~~February~~ 23, 1938, contract made with M. J. Walsh & Sons, of Holyoke, for constructing a dike wall and miscellaneous work on Riverdale Road, the wall to be of cement concrete masonry supported on steel sheeting. The proposal amounted to \$17,823.55. Work completed July 5, 1938. Expenditure during 1938, \$15,077.44.

Eastham

April 5, 1938, contract made with Michael F. Roach & Sons, Inc., of East Bridgewater, for reconstructing about 2,280 feet of State highway on County Road and new location, the surface consisting of Class I bituminous concrete. The proposal amounted to \$51,903.70. Work completed August 31, 1938. Expenditure during 1938, \$50,850.07.

Saugus

April 27, 1938, contract made with William P. Herlihy, of Cambridge, for furnishing and planting trees, shrubs, vines and plants along Automobile Route No. 1 (Newburyport Turnpike) beginning at Essex Street underpass and extending to the Lynnfield Town Line. The proposal amounted to \$14,371.75. Work completed November 5, 1938. Expenditure during 1938, \$11,479.76.

Lynnfield-Peabody

April 27, 1938, contract made with William P. Herlihy, of Cambridge, for furnishing and planting trees, shrubs and vines along Automobile Route No. 1 and the Northern Circumferential Highway, beginning on Route No. 1 at the Saugus Line to about the grade crossing with the ~~Exand~~ Boston and Maine Railroad. The proposal amounted to \$12,067.05. Work completed November 5, 1938. Expenditure during 1938, \$9,164.44.

Methuen

May 3, 1938, contract made with Central Construction Co., of Lawrence, for reconstructing about 19,372 feet of State highway on Jackson Street, in Lawrence, Swan, East and Merrimac Streets, in Methuen, and Merrimac Street, in Haverhill, the surface on the roadway consisting of Class I bituminous concrete, and the surface on the approaches consisting of standard bituminous macadam and bituminous concrete. The proposal amounted to \$304,782.48. Work about five-sixths completed. Expenditure during 1938, \$241,541.91.

Revere-Malden-Saugus

May 5, 1938, contract made with New England Tree Expert Co., Inc., of Boston, for furnishing and planting trees, shrubs and vines along Automobile Route No. C-1 beginning at the traffic circle at Squire Road and Broadway northerly to the Essex Street underpass. The proposal amounted to \$14,090.65. Work completed October 15, 1938. Expenditure during 1938, \$11,807.05.

Lenox-Shrewsbury-Concord-Norwood

May 18, 1938, contract made with Paul Govoni, of Worcester, for furnishing and installing pit-scales and approaches thereto, the surface consisting of bituminous macadam. The proposal amounted to \$10,636.97. Work completed July 2, 1938. Expenditure during 1938, \$11,772.53.

Boston-Milton

May 24, 1938, contract made with M. DeMatteo Construction Co., of Boston, for constructing about 12,320.98 feet of State highway on new location in Boston, and on Fairmount Avenue in Boston and on the same road in Milton, the surface consisting of Class I bituminous concrete. The proposal amounted to \$245,907.91. Work about nine-tenths completed. Expenditure during 1938, \$180,391.20.

Pittsfield

June 1, 1938, contract made with City of Pittsfield, for reconstructing about 240 feet of State highway on South Street, the surface consisting of Class I bituminous concrete. The proposal amounted to \$4,907.35. Work about seven-tenths completed. Expenditure during 1938, \$3,439.20.

Peabody

June 30, 1938, contract made with M. McDonough Corp., of Saugus, for constructing a steel stringer bridge with a concrete deck to carry the State highway (Northern Circumferential Highway - Route 128) under Andover Street, the surface consisting of Class I bituminous concrete. The proposal amounted to \$71,780.50. Work about five-sevenths completed. Expenditure during 1938, \$53,286.29.

West Springfield

July 12, 1938, contract made with B. A. Gardetto, Inc., of Boston, for constructing about 3,108 feet of State highway on Riverdale Road, the surface consisting of Class I bituminous concrete. The proposal amounted to \$50,368.40. Work about four-fifths completed. Expenditure during 1938, \$41,415.83.

Lenox-Wrentham

July 12, 1938, contract made with Paul Govoni, of Worcester, for furnishing and installing pit-scales and approaches thereto, the surface consisting of bituminous macadam. The proposal amounted to \$8,570.86. Work completed August 17, 1938. Expenditure during 1938, \$2,691.98.



Becket

~~August~~ 23, 1938, contract made with Arute Bros., Incorporated, of Bridgewater, for reconstructing about 23,270 feet of State highway on Washington Road, the surface consisting of bituminous macadam. The proposal amounted to \$172,232.70. Work about one-fifth completed. Expenditure during 1938, \$34,254.69.

Montague-Sunderland

~~August~~ 24, 1938, contract made with Daniel O'Connell's Sons, Inc., of Holyoke, for constructing about 3,209 feet of State highway on new location in Montague, and about 1,600 feet on new location in Sunderland, and constructing a steel stringer bridge over the Central Vermont Railway, in Montague, the surface of the road consisting of a penolithic type of pavement, and the bridge surface consisting of bituminous concrete. The proposal amounted to \$82,113.16. Work about one-fourth completed. Expenditure during 1938, \$24,089.70.

Holbrook-Braintree

~~August~~ 24, 1938, contract made with Edward T. Dwyer, of East Braintree, for reconstructing about 4,645.60 feet of State highway on Franklin Street, in Holbrook, and Washington Street, in Braintree, the surface consisting of Class I bituminous concrete. The proposal amounted to \$57,588.06. Work about three-sevenths completed. Expenditure during 1938, \$23,600.28.

Alford

~~September~~ 13, 1938, contract made with Forrest Construction Co., of Woburn, for reconstructing about 7,707 feet of State highway on Green River Valley Road, the surface consisting of a penolithic type of pavement. The proposal amounted to \$51,294.20. Work about one-third completed. Expenditure during 1938, \$16,162.63.

Chelmsford

~~October~~ 4, 1938, contract made with B. A. Gardetto, Inc., of Boston, for grading and drainage in connection with State highway construction, about 6,550 feet of State highway, on new location, in Chelmsford. The proposal ~~amounted to~~ amounted to \$104,685.50. Work just commenced. Expenditure during 1938, \$6,885.00.

Tewksbury

~~October~~ 14, 1938, contract made with Coleman Bros. Corporation, of Boston, for reconstructing about 15,996 feet of State highway on Main Street, the surface consisting of Class I bituminous concrete. The proposal amounted to \$110,738.00. Work just commenced. Expenditure during 1938, \$425.00.

Sutton

~~October~~ 14, 1938, contract made with A. G. Tomasello, Inc., of Boston, for constructing about 6,700 feet of State highway on new location, 2,275 feet of State highway on Central Turnpike and constructing a concrete slab bridge on the Worcester-Uxbridge highway over Cold Spring Brook, and approaches thereto, the surface of the highway and approaches consisting of a penolithic type of pavement. The proposal amounted to \$218,828.60. Work about two-ninths completed. Expenditure during 1938, \$43,690.00.

Easthampton

~~October~~ 18, 1938, contract made with G. Bonazzoli & Sons, of Hudson, for reconstructing about 6,863 feet of State highway on Northampton Street, the surface consisting of a penolithic type of pavement. The proposal amounted to \$71,803.00. Work not yet commenced. No expenditure during 1938.

Brookline-Boston

October 27, 1938, contract made with Louis A. Reardon, of North Abington, for furnishing and planting trees, shrubs and vines at the Huntington Avenue grade separation. The proposal amounted to \$3,985.50. Work about one-half completed. Expenditure during 1938, \$1,711.90.

Northfield

November 2, 1938, contract made with Domenic M. Bernardi, Inc., of Wellesley, for constructing about 5,685 feet of State highway on Wanamaker Road and Hinsdale Road, and constructing a concrete slab bridge on Hinsdale Road over Perchog Brook, the surface of the road consisting of a penolithic type of pavement. The proposal amounted to \$81,042.40. Work not yet commenced. No expenditure during 1938.

North Adams

November 30, 1938, contract made with Gordon & Sutton, of North Adams, for reconstructing about 250 feet of State highway on Ashland Street, the surface consisting of reinforced cement concrete. The proposal amounted to \$1,096.50. Work not yet commenced. No expenditure during 1938.

Berkshire County. - Adams, \$1,100.00; Dalton, \$1,100.00; Greenfield, \$1,100.00; North Adams, \$1,100.00; Pittsfield, \$1,100.00; Springfield, \$1,100.00; Westfield, \$1,100.00; Worcester, \$1,100.00.

Bristol County. - Fall River, \$1,100.00; New Bedford, \$1,100.00; Taunton, \$1,100.00; Uxbridge, \$1,100.00; Weymouth, \$1,100.00; Whitman, \$1,100.00; Wrentham, \$1,100.00.

Essex County. - Andover, \$1,100.00; Amesbury, \$1,100.00; Beverly, \$1,100.00; Danvers, \$1,100.00; Lynn, \$1,100.00; Lynnfield, \$1,100.00; Salem, \$1,100.00; Swampscott, \$1,100.00; Woburn, \$1,100.00; Worcester, \$1,100.00.

Franklin County. - Montague, \$1,100.00; Northfield, \$1,100.00; Greenfield, \$1,100.00; Sunderland, \$1,100.00.

Hampden County. - Holyoke, \$1,100.00; West Springfield, \$1,100.00; Springfield, \$1,100.00.

Hampshire County. - Easthampton, \$1,100.00; Hatfield, \$1,100.00; Northampton, \$1,100.00; Southampton, \$1,100.00; Westhampton, \$1,100.00.

Middlesex County. - Billerica, \$1,100.00; Haverhill, \$1,100.00; Lowell, \$1,100.00; Lynn, \$1,100.00; Melrose, \$1,100.00; North Andover, \$1,100.00; North Attleboro, \$1,100.00; North Attleboro, \$1,100.00; North Attleboro, \$1,100.00.

Norfolk County. - Braintree, \$1,100.00; Duxbury, \$1,100.00; Framingham, \$1,100.00; Mattapa, \$1,100.00; Needham Heights, \$1,100.00; Norwood, \$1,100.00; Quincy, \$1,100.00; Roslindale, \$1,100.00; South Norwood, \$1,100.00; Weymouth, \$1,100.00.

Plymouth County. - Duxbury, \$1,100.00; Framingham, \$1,100.00; Mattapa, \$1,100.00; Needham Heights, \$1,100.00; Norwood, \$1,100.00; Quincy, \$1,100.00; Roslindale, \$1,100.00; South Norwood, \$1,100.00; Weymouth, \$1,100.00.

Suffolk County. - Boston, \$1,100.00; Cambridge, \$1,100.00; Chelsea, \$1,100.00; Everett, \$1,100.00; Lynn, \$1,100.00; Malden, \$1,100.00; Mattapa, \$1,100.00; Needham Heights, \$1,100.00; Norwood, \$1,100.00; Quincy, \$1,100.00; Roslindale, \$1,100.00; South Norwood, \$1,100.00; Weymouth, \$1,100.00.

Worcester County. - Athol, \$1,100.00; Ayer, \$1,100.00; Barre, \$1,100.00; Belchertown, \$1,100.00; Chicopee, \$1,100.00; Fitchburg, \$1,100.00; Greenfield, \$1,100.00; Haverhill, \$1,100.00; Holden, \$1,100.00; Leominster, \$1,100.00; North Andover, \$1,100.00; North Attleboro, \$1,100.00; North Attleboro, \$1,100.00; North Attleboro, \$1,100.00.



# EXPENDITURES FOR CONSTRUCTION OF STATE HIGHWAYS

The expenditures during the year in various counties were:-

Barnstable,	\$ 205,770.94	Hampshire,	\$ 1,283,479.06
Berkshire,	84,257.74	Middlesex,	187,491.10
Bristol,	1,615.80	Norfolk,	193,467.14
Essex,	682,111.69	Plymouth,	807.87
Franklin,	36,460.13	Suffolk,	291,502.53
Hampden,	102,247.27	Worcester,	242,833.78
		Total	\$ 3,312,045.05

Details of the foregoing expenditures follow:

Barnstable County. - Bourne, \$65,118.82; Eastham, \$127,907.21; Falmouth, \$1,925.52; Orleans, \$10,819.39.

Berkshire County. - Alford, \$22,326.49; Becket, \$47,848.82; Lenox, \$8,945.44; Pittsfield, \$5,136.99.

Bristol County. - Fall River, \$55.39; Raynham, \$145.53; North Attleborough, \$1,414.88;

Essex County. - Andover, \$59,530.97; Gloucester, \$970.20; Lawrence, \$40,643.56; Lynn, \$4,671.74; Lynnfield, \$7,406.59; Methuen, \$356,174.71; Newburyport, \$17,259.52; Peabody, \$93,201.87; Saugus, \$43,202.45; Swampscott, \$59,050.08.

Franklin County. - Montague, \$30,638.46; Northfield, \$107.96; Orange, \$2,534.88; Sunderland, \$3,178.83.

Hampden County. - Holyoke, \$18,672.92; West Springfield, \$83,574.35;

Hampshire County. - Easthampton, \$255.83; Hadley, \$658,192.35; Huntington, \$197.21; Northampton, \$624,833.67.

Middlesex County. - Billerica, \$815.79; Chelmsford, \$9,866.53; Concord, \$72,717.83; Lexington, \$212.40; Lowell, \$132.35; Malden, \$48,425.38; Newton, \$5,321.15; Tewksbury, \$49,602.60; Winchester, \$397.07.

Norfolk County. - Braintree, \$1,009.62; Brookline, \$18,346.64; Holbrook, \$31,876.94; Milton, \$134,324.57; Wellesley, \$4,154.70; Wrentham, \$3,754.67.

Plymouth County. - Hingham, \$448.14; Mattapoisett, \$359.73;

Suffolk County. - Boston, \$209,244.67; Revere, \$82,257.86

Worcester County. - Athol, \$7,047.64; Auburn, \$13.24; Fitchburg, \$64,402.39; Hopedale, \$29.15; Leominster, \$101,777.08; Millbury, \$6,485.40; Northboro, \$19.85; Shrewsbury, \$4,023.03; Sturbridge, \$403.04; Sutton, \$58,632.96.

# HIGHWAY IMPROVEMENTS AUTHORIZED BY SPECIAL ACTS

## Massachusetts Flood Replacement Projects (Bridges)

~~Chapter 429, Acts of 1936~~

The reconstruction of Massachusetts bridges which were damaged in the flood of 1936 was financed partly by federal funds and partly by funds contributed by the State, Counties, Cities and Towns.

The federal funds were authorized under the Emergency Relief Appropriation Act of 1936, approved June 22, 1936. These funds were apportioned to the States by the Department of Agriculture acting through the Bureau of Public Roads.

The remainder of the cost was borne by the State, Counties, Cities and Towns. Those projects which were on state highways were financed under the provisions of Chapter 186 of the Acts of 1936. The greater part of the projects however were not on state highways and these projects were financed under the provisions of Chapter 429 of the Acts of 1936.

The following lists show the projects and the federal funds apportioned for each project:

### Projects carried out under Chapter 429, Acts of 1936

<u>Town-City</u>	<u>WPR No.</u>	<u>Amount</u>
Adams	1	\$32,775.00
Ashfield	24	17,880.00
Athol	53	28,875.00
Athol-Orange	19	25,050.00
Athol-Orange	20	23,652.00
Barre	58	34,350.00
Barre	59	25,800.00
Belchertown-Palmer.	36	42,600.00
Berlin	60	19,800.00
Bolton	61	25,950.00
Charlemont-Shelburne	6	48,000.00
Colrain	5	49,125.00
Colrain	8	28,275.00
Colrain	12	14,520.00
Dudley	66	17,850.00
Dudley-Webster	67	18,450.00
Erving-Montague	10	45,000.00
Fitchburg	69	30,450.00
Gardner-Templeton	106	9,150.00
Hadley	29	22,551.75*
Hatfield	30	32,550.00
Holden	71	16,486.00
Lancaster	76	40,050.00
Leominster	77	45,225.00
Lowell	39	12,435.00
Ludlow-Wilbraham	33	56,360.00
Lunenburg	78	9,130.50*

*Continued*



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Northfield	14	\$10,875.00
Northfield	17	22,143.00
Orange	18	93,750.00
Orange	21	49,425.00
Orange	22	26,775.00
Palmer	34	31,521.00
Palmer	35	38,091.00
Pepperell	42	25,800.00
Pepperell	43	90,000.00
Petersham	86	26,685.00
Princeton	87	15,000.00
Princeton-Sterling	90	14,250.00
Royalston	91	29,025.00
Royalston	133	27,000.00
Sterling	104	11,925.00
Sutton	105	28,950.00
Townsend	45	19,125.00
Uxbridge	112	48,600.00
Ware	31	42,300.00
Ware	32	47,682.00
Winchendon	124	23,850.00
	Total	\$1,495,112.25

WPFR Projects on State Highways

*Projects carried out under Chapter 186, Acts of 1936*

Fitchburg	129	6,976.00
Sutton	128	11,577.00
Winchendon	130	7,437.00
Winchendon	131	5,280.00
	Total on State Highways	\$31,270.00

Grand Total of all WPFR Projects \$1,526,382.25

\*These amounts are final payments received.  
All other amounts shown are agreement amounts.

Balances from these projects cannot be transferred.  
If not used they revert to the Federal Government.

The expenditures during the year under Chapter 429 (Acts of 1936)  
for the construction of certain bridges in various counties were as follows:

Berkshire,	\$ 14,036.81
Franklin,	234,102.40
Hampden,	33,903.00

Hampshire,	\$ 59,077.49
Middlesex,	31,994.01
Worcester,	166,710.68
<b>Total</b>	<b>\$539,824.39</b>

Details of the foregoing Expenditures follow:

#### Berkshire County

<u>Proj. #</u>	<u>Town</u>	<u>Sub-Total</u>	<u>Total</u>
WPFR 1	Adams		\$ 14,036.81

#### Franklin County

WPFR 24	Ashfield		1,492.12
H.B. 2-12	Colrain	57.50	
" 2-7	"	38.25	
WPFR 5	"	48,895.63	
" 8	"	10,816.21	
" 12	"	5,174.28	
" 6	Charlemont		64,981.87
" 10	Erving		20,676.38
" 10	Montague	5,081.21	
H.B. 2-9	"	55.45	
" 2-10	Northfield	113.53	
WPFR 14	"	2,560.08	
" 17	"	3,887.27	
" 18	Orange	66,428.44	
" 21	"	19,652.69	
" 22	"	7,409.03	
" 19	"	3,271.09	
" 20	"	2,763.84	
" 6 *	Shelburne		99,525.09
			20,742.65
			<b>\$234,102.40</b>

#### Hampden County

WPFR 33	Ludlow		1,800.20
" 34	Palmer	1,131.10	
" 35	"	16,574.68	
" 36	"	12,695.56	
" 33	Wilbraham		30,401.34
			1,701.46
			<b>\$ 33,903.00</b>

#### Hampshire County

WPFR 36	Belchertown		12,178.19
" 29	Hadley		3,045.54
" 30	Hatfield		9,803.13
" 31	Ware	19,799.08	
" 32	"	14,251.55	
			34,050.63
			<b>\$ 59,077.49</b>



# Middlesex County

WPFR 39	Lowell		13,406.02
" 42	Pepperell	6,320.36	
" 43 C#1	"	53.41	
" 43 C#2	"	775.11	7,148.88
" 45	Townsend		11,439.11
			<u>\$ 31,994.01</u>

# Worcester County

H.B. 3-36	Ashburnham	3.29	
" 3-35	"	25.00	
" 3-60	"	43.00	
" 3-66	"	153.82	
" 3-80	"	681.85	
" 3-86	"	472.39	
" 3-95	"	364.35	
" 3-78	"	6.40	1,750.10
" 3-70	Athol	32.19	
" 3-97	"	100.45	
WPFR 19	"	2,692.62	
" 20	"	2,849.16	
" 53	"	13,592.79	19,267.21
H.B. 3-100	Barre	164.41	
WPFR 58	"	10,406.13	
" 59	"	4,948.75	15,519.29
" 60	Berlin		4,386.25
" 61	Bolton		6,468.71
H.B. 3-84	Charlton		2.26
" 3-16	Dudley	3.95	
WPFR 66	"	2,866.62	
" 67	"	1,337.08	4,207.65
" 69	Fitchburg	7,380.76	
H.B. 3-43	"	1,337.18	8,717.94
WPFR 106	Gardner		1,077.73
" 71	Holden	3,407.14	
H.B. 3-94	"	462.61	
" 3-72	"	71.30	3,941.05
WPFR 76	Lancaster		263.89
" 77	Leominster	8,471.58	
H.B. 3-11	"	2.15	8,473.73
WPFR 78	Lunenburg		1,928.01
H.B. 3-82	Millbury		388.51
WPFR 86	Petersham	4,677.47	
H.B. 3-81	"	112.36	4,789.83
" 3-71	Princeton	327.85	
WPFR 87	"	2,880.70	
" 90	"	1,459.77	4,668.32
" 91	Royalston	28,155.72	
" 133	"	6,605.12	
H.B. 3-49	"	10.00	
" 3-69	"	283.30	35,054.14
" 3-98	Rutland	56.06	
" 3-99	"	1,155.29	1,211.35
" 3-59	Southbridge		14.25
" 3-89	Spencer		8.47

# FLOOD REPLACEMENT PROJECT

WPFR 105	Sutton		12,628.48
" 106	Templeton	1,007.67	
H.B. 3-73	"	151.00	1,158.67
" 3-74	Upton	207.18	
" 3-90	"	467.75	674.93
" 3-63	Uxbridge	181.32	
WPFR 112	"	16,020.13	16,201.45
" 90	Sterling	1,387.45	
" 104	"	2,981.91	4,369.36
" 67	Webster		1,257.18
H.B. 3-79	Warren		184.16
" 3-65	Westminster		226.85
" 3-85	Winchendon	1,887.58	
WPFR 124	"	5,983.33	7,870.91
			<u>\$166,710.68</u>



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# FLOOD REPLACEMENT PROJECTS, TOWN AND COUNTY WAYS

~~HIGHWAY IMPROVEMENTS AUTHORIZED BY CHAPTER 505, ACTS OF 1938~~

In accordance with the provisions of Chapter 505, Item A, of the Acts of 1938, the following contracts were entered into:-

## Wareham

October 3, 1938, contract made with Roy B. Rendle & Company, Inc., of Boston, for constructing a temporary bridge over Wareham Narrows, consisting of pile and timeber. The proposal amounted to \$18,510.00. Work completed November 5, 1938. Expenditure during 1938, \$15,723.50.

## Barre

October 6, 1938, contract made with Coleman Bros. Corporation, of Boston, for reconstructing the existing bridge known as Hennock Bridge, and approaches thereto. The proposal amounted to \$38,699.65. Work about three-sevenths completed. Expenditure during 1938, \$16,872.04.

## Chicopee

October 7, 1938, contract made with T. Stuart & Son Company, of Boston, for furnishing plant, labor and materials for and the construction of a temporary foot bridge, and approaches thereto, over the Chicopee River. The proposal amounted to \$19,800.00. Work completed October 21, 1938. Expenditure during 1938, \$16,830.00.

## Becket-Lenox

October 11, 1938, contract made with Petricca Construction Company, of Pittsfield, for reconstruction and repair of bridges, ~~and town ways~~ and approaches thereto, on town ways. The proposal amounted to \$16,113.80. Work about one-fourth completed. Expenditure during 1938, \$4,766.09.

## Otis-Tyringham

October 11, 1938, contract made with M. J. Walsh & Sons, of Holyoke, for reconstruction and repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$27,869.65. Work about one-tenth completed. Expenditure during 1938, \$2,610.35.

## Chicopee

October 11, 1938, contract made with T. Stuart & Son Company, of Boston, for reconstruction of a bridge. The proposal amounted to \$326,212.75. Work about one-sixth completed. Expenditure during 1938, \$52,531.02.

## Lee

October 11, 1938, contract made with Keeler and Carnevale, of Pittsfield, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$6,028.00. Work about one-sixth completed. Expenditure during 1938, \$675.75.

## Falmouth

October 11, 1938, contract made with Sidney W. Lawrence, of Falmouth, for constructing a temporary foot bridge at Eel Pond, Woods Hole, on a town way. The proposal amounted to \$5,500.00. Work completed November 23, 1938. Expenditure during 1938, \$4,675.00.

## Barre

October 11, 1938, contract made with C. & R. Construction Co., of Boston, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$164,400. Work just commenced. Expenditure during 1938, \$2,451.40.

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Dartmouth

October 11, 1938, contract made with New Bedford Contracting Co., of Dartmouth, for constructing a temporary pile and timber bridge, on a town way, and approaches thereto. The proposal amounted to \$3,150.00. Work completed November 9, 1938. Expenditure during 1938, \$2,677.50.

Buckland-Leyden

October 11, 1938, contract made with Kelleher Corporation, of Montague, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$90,000.00. Work about two-fifths completed. Expenditure during 1938, \$37,508.93.

Charlemont-Hawley

October 13, 1938, contract made with B. A. Gardetto, Inc., of Boston, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$341,000.00. Work about one-third completed. Expenditure during 1938, \$126,450.93.

<sup>Ja<sup>h</sup></sup>  
Lanesboro-Washington

October 13, 1938, contract made with Lindholm Construction Co. Inc., of Pittsfield, for construction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$16,400.00. Work about one-fourth completed. Expenditure during 1938, \$4,590.85.

Templeton

October 13, 1938, contract made with M. F. Gaddis, Inc., of Boston, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$38,100.00. Work about one-sixth completed. Expenditure during 1938, \$6,469.14.

Becket-Cheshire

October 13, 1938, contract made with Petricca Construction Company, of Pittsfield, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$39,200.00. Work about one-fifth completed. Expenditure during 1938, \$8,773.70.

Lee

October 13, 1938, contract made with Farrell and Gregory, of Pittsfield, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$31,900.00. Work about one-fifth completed. Expenditure during 1938, \$6,640.62.

Hancock

October 13, 1938, contract made with Louis J. Dee, of Hancock, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$10,100.00. Work about two-fifths completed. Expenditure during 1938, \$4,231.64.

Falmouth

October 13, 1938, contract made with H. D. Smith, of Falmouth, for repairing a bridge, on a town way. The proposal amounted to \$2,400.00. Work completed November 22, 1938. Expenditure during 1938, \$2,040.00.



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Monroe-Rowe-Heath-Colrain

~~October~~ 13, 1938, contract made with The Lane Construction Corporation, of Meriden, Connecticut, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$420,000.00. Work about one-tenth completed. Expenditure during 1938, \$48,580.09.

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Williamstown

~~October~~ 14, 1938, contract made with Carlo Bianchi and Company Inc., of Framingham, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$76,400. Work just commenced. Expenditure during 1938, \$6,278.92.

\*\* Ashfield-Orange-Conway-Warwick-Montague-Northfield-Gill

~~October~~ 13, 1938, contract made with Daniel O'Connell's Sons, Inc., of Holyoke, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$221,000.00. Work just commenced. Expenditure during 1938, \$3,740.00.

Westfield

~~October~~ 14, 1938, contract made with Fred T. Ley & Co., Inc., of Springfield, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$27,500.00. Work about one-fifth completed. Expenditure during 1938, \$5,304.00.

Granville

~~October~~ 14, 1938, contract made with G. Bonazzoli & Sons, of Hudson, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$50,600.00. Work about one-fourth completed. Expenditure during 1938, \$13,371.35.

Brimfield-Monson

~~October~~ 14, 1938, contract made with John Kitson, of South Weymouth, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$5,600.00. Work not yet commenced. No expenditure during 1938.

Ware

of Boston,

~~October~~ 14, 1938, contract made with C. & R. Construction Company, /for reconstruction or repair of a bridge, and approaches thereto, /on town ways. The proposal amounted to \$32,500.00. Work not yet commenced. No expenditure during 1938.

Gosnold

~~October~~ 14, 1938, contract made with J. S. Packard Dredging Company, of Boston, for dredging the basin in Cuttyhunk Harbor. The proposal amounted to \$19,620.00. Work about one-half completed. Expenditure during 1938, \$9,996.00.

Monson-Hampden

~~October~~ 18, 1938, contract made with John Kitson, of South Weymouth, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$19,900.00. Work about one-sixth completed. Expenditure during 1938, \$3,240.32.

Hardwick

~~October~~ 18, 1938, contract made with James B. Rendle Company, of Malden, for constructing a temporary foot bridge, and approaches thereto, on a town way. The proposal amounted to \$7,000.00. Work completed October 31, 1938. Expenditure during 1938, \$5,950.00.

Monterey-Sandisfield-Windsor

~~October~~ 18, 1938, contract made with T. A. Pearson Associates, Inc., of Boston, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$91,700.00. Work about one-eleventh completed. Expenditure during 1938, \$8,768.60.

Lee-Tyringham

~~October~~ 19, 1938, contract made with Middlesex Construction Company, of Framingham, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$56,700.00. Work about one-fifth completed. Expenditure during 1938, \$10,195.75.

Brimfield- E. Brookfield

~~October~~ 19, 1938, contract made with C. C. Smith Company, Incorporated, of Cambridge, for reconstruction or repair of bridges, <sup>and approaches thereto</sup> on town ways. The proposal amounted to \$18,500. Work not yet commenced. No expenditure during 1938.

Granby-Ludlow

~~October~~ 19, 1938, contract made with Fred T. Ley & Co., Inc., of Springfield, for reconstruction or repair of bridges, <sup>and approaches thereto</sup> on town ways. The proposal amounted to \$13,100.00. Work not yet commenced. No expenditure during 1938.

Adams

~~October~~ 21, 1938, contract made with Nelson H. Bond, of Adams, for reconstruction or repair of a bridge, <sup>and approaches thereto</sup> on a town way. The proposal amounted to \$25,600.00. Work about one-eighth completed. Expenditure during 1938, \$3,128.00.

Hampden-Monson

~~October~~ 21, 1938, contract made with John Kitson, of South Weymouth, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$9,700.00. Work not yet commenced. No expenditure during 1938.

Monson-Warren

~~October~~ 21, 1938, contract made with John Kitson, of South Weymouth, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$5,800.00. Work about one-seventh completed. Expenditure during 1938, \$874.35.

Savoy

~~October~~ 21, 1938, contract made with Gordon and Sutton, of North Adams, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$31,400.00. Work about one-tenth completed. Expenditure during 1938, \$3,657.12.

East Longmeadow

~~October~~ 21, 1938, contract made with Casper Ranger Construction Company, of Holyoke, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$11,100.00. Work about one-eleventh completed. Expenditure during 1938, \$1,636.63.



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Gardner

~~October~~ 21, 1938, contract made with Columbus and Berg, of Gardner, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$27,600.00. Work about one-third completed. Expenditure during 1938, \$9,882.86.

West Stockbridge

~~October~~ 21, 1938, contract made with Lindholm Construction Co. Inc., of Pittsfield, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$6,000.00. Work not yet commenced. No expenditure during 1938,

Spencer

~~October~~ 21, 1938, contract made with Swanson and Janson, of Worcester, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$20,000.00. Work just commenced. Expenditure during 1938, \$646.00.

Middlefield-Chester

~~October~~ 21, 1938, contract made with Frank T. Westcott, of North Attleboro, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$150,000.00. Work just commenced. Expenditure during 1938, \$6,265.35.

Adams

~~October~~ 21, 1938, contract made with Lindholm Construction Co. Inc., of Pittsfield, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$46,200.00. Work just commenced. Expenditure during 1938, \$2,962.25.

New Marlborough

~~October~~ 21, 1938, contract made with Graves & Hemmes, Inc., of Great Barrington, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$42,300.00. Work about one-third completed. Expenditure during 1938, \$14,572.40.

Fall River-Somerset

~~October~~ 21, 1938, contract made with Coleman Bros. Corporation, of Boston, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$11,212.00. Work about two-fifths completed. Expenditure during 1938, \$4,837.14.

Gosnold

~~October~~ 21, 1938, contract made with Louis A. Byrne, of Dennisport, for rebuilding a town way, at Cuttyhunk. The proposal amounted to \$9,180.00. Work not yet commenced. No expenditure during 1938.

Dartmouth

~~October~~ 24, 1938, contract made with Powers Bros. Co., of Brockton, for construction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$44,600.00. Work about one-sixth completed. Expenditure during 1938, \$7,815.75.

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Chesterfield

~~October~~ 24, 1938, contract made with Antonio Pandiscio, of Fitchburg, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$40,000.00. Work about one-tenth completed. Expenditure during 1938, \$4,120.37.

New Marlborough

~~October~~ 24, 1938, contract made with Graves and Hemmes, Inc., of Great Barrington, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$24,100.00. Work about one-eighth completed. Expenditure during 1938, \$3,584.87.

Southampton-Westhampton

~~October~~ 24, 1938, contract made with Casper Ranger Construction Company, of Holyoke, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$19,200.00. Work just commenced. Expenditure during 1938, \$1,403.35.

Sturbridge

~~October~~ 24, 1938, contract made with Frank J. Shields, Incorporated, of Southbridge, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$3,300.00. Work not yet commenced. No expenditure during 1938.

Otis

~~October~~ 24, 1938, contract made with M. J. Walsh & Sons, of Holyoke, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$32,000.00. Work just commenced. Expenditure during 1938, \$2,146.25.

Savoy-West Stockbridge

~~October~~ 24, 1938, contract made with Lindholm Construction Co., Inc., of Pittsfield, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$20,100.00. Work not yet commenced. No expenditure during 1938.

Montgomery

~~October~~ 24, 1938, contract made with P. J. Kennedy & Company, of Holyoke, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$13,400.00. Work about one-eighth completed. Expenditure during 1938, \$1,695.75.

Goshen-Westhampton

~~October~~ 24, 1938, contract made with George H. Reed & Co. Inc., of Greenfield, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$54,400.00. Work just commenced. Expenditure during 1938, \$3,830.95.

Adams

~~October~~ 24, 1938, contract made with T. J. Harvey & Son, of Adams, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$80,800.00. Work just commenced. Expenditure during 1938, \$962.84.



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Templeton

~~October~~ 24, 1938, contract made with Mario Pandolf Company, Inc., of Needham, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$56,700.00. Work not yet commenced. No expenditure during 1938.

Templeton

~~October~~ 24, 1938, contract made with M. F. Gaddis, Inc., of Boston, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$28,600.00. Work not yet commenced. No expenditure during 1938.

New Marlborough

~~October~~ 24, 1938, contract made with The Crandall Engineering Company, of Boston, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$71,000.00. Work not yet commenced. No expenditure during 1938.

Fairhaven-New Bedford

~~October~~ 24, 1938, contract made with Daniel Marr and Son Company, of Boston, for repairing a bridge, and approaches thereto, on a town way. The proposal amounted to \$6,480.50. Work not yet commenced. No expenditure during 1938.

Fitchburg

~~October~~ 24, 1938, contract made with John Moran, Inc., of Fitchburg, for reconstruction or repair of a bridge, and approaches thereto, on a city way. The proposal amounted to \$59,200.00. Work not yet commenced. No expenditure during 1938.

Dighton-Somerset-Swansea

~~October~~ 24, 1938, contract made with National Contractors Company, of Boston, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$88,900.00. Work just commenced. Expenditure during 1938, \$5,032.00.

Brimfield-Monson

~~October~~ 24, 1938, contract made with C. C. Smith Company, Incorporated, of Cambridge, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$24,200.00. Work about one-twelfth completed. Expenditure during 1938, \$2,694.50.

Westhampton

~~October~~ 24, 1938, contract made with Casper Ranger Construction Company, of Holyoke, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$1,500.00. Work not yet commenced. No expenditure during 1938.

Southbridge-Warren

~~October~~ 24, 1938, contract made with Frank J. Shields, Incorporated, of Southbridge, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$11,800.00. Work not yet commenced. No expenditure during 1938.

Hardwick-Ware-Westhampton

~~October~~ 24, 1938, contract made with Wachusett Engineering Co., Inc., of Fitchburg, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$63,000.00. Work not yet commenced. No expenditure during 1938.

Falmouth

October 24, 1938, contract made with Blakeslee Rollins Corporation, of Boston, for reconstructing a bridge, and approaches thereto, on a town way. The proposal amounted to \$52,284.25. Work just commenced. Expenditure during 1938, \$3,846.25.

Templeton

October 24, 1938, contract made with M. F. Gaddis, Inc., of Boston, for reconstructing or repairing a bridge, and approaches thereto, on a town way. Work not yet commenced. No expenditure during 1938.

Tolland

October 24, 1938, contract made with J. J. Callahan, of Boston, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$30,300.00. Work just commenced. Expenditure during 1938, \$595.00.

Ludlow-Springfield

October 24, 1938, contract made with Coleman Bros. Corporation, of Boston, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$134,162.30. Work not yet commenced. No expenditure during 1938.

Ludlow-Wilbraham

October 24, 1938, contract made with Coleman Bros. Corporation, of Boston, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$287,500.00. Work not yet commenced. No expenditure during 1938.

New Marlborough

October 25, 1938, contract made with Interstate Construction Co. Inc., of Boston, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$49,200.00. Work not yet commenced. No expenditure during 1938.

Wareham

October 25, 1938, contract made with Roy B. Rendle & Company, Inc., of Boston, for reconstruction or repair of bridges, and approaches thereto, and miscellaneous work, on town ways. The proposal amounted to \$95,602.12. Work not yet commenced. No expenditure during 1938.

Russell

October 25, 1938, contract made with Rome Construction Company, of Holden, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$28,700.00. Work about one-ninth completed. Expenditure during 1938, \$3,205.77.

Sandisfield

October 25, 1938, contract made with M. J. Walsh & Sons, of Holyoke, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$51,300.00. Work not yet commenced. Expenditure during 1938, \$0.

Dudley-Webster

October 25, 1938, contract made with Federal Contracting Company, Inc., of Boston, for reconstruction or repair of bridges, and approaches thereto, on a town way. The proposal amounted to \$32,800. Work just commenced. Expenditure during 1938, \$2,266.52.



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Sturbridge

~~October~~ 25, 1938, contract made with R. J. Connolly, Inc., of Boston, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$25,600.00. Work not yet commenced. No expenditure during 1938.

Petersham-Sturbridge

~~October~~ 25, 1938, contract made with James H. Fannon, of Arlington, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$39,900.00. Work not yet commenced. No expenditure during 1938.

Hinsdale-Peru

~~October~~ 25, 1938, contract made with Sam Failla, of Greenfield, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$20,000.00. Work about one-tenth completed. Expenditure during 1938, \$2,167.50.

Monson-Southbridge-Warren

~~October~~ 25, 1938, contract made with Frank J. Shields, Incorporated, of Southbridge, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$54,700.00. Work just commenced. Expenditure during 1938, \$765.00.

Adams

~~October~~ 25, 1938, contract made with Lindholm Construction Co. Inc., of Pittsfield, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$30,500.00. Work not yet commenced. No expenditure during 1938.

Windsor

~~October~~ 25, 1938, contract made with Warner Bros. and Goodwin, Inc., of Sunderland, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$60,800.00. Work just commenced. Expenditure during 1938, \$877.62.

Cheshire

~~October~~ 25, 1938, contract made with Petricca Construction Company, of Pittsfield, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$107,700.00. Work about one-seventh completed. Expenditure during 1938, \$15,703.75.

Brimfield-Monson-Palmer

~~October~~ 25, 1938, contract made with Earl M. Carriere Co., of Boston, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$55,900.00. Work not yet commenced. No expenditure during 1938.

Brimfield

~~October~~ 25, 1938, contract made with John Kitson, of South Weymouth, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$11,300.00. Work not yet commenced. No expenditure during 1938.

Bourne-Falmouth

~~October~~ 25, 1938, contract made with Bay State Dredging & Contracting Co., of Boston, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$163,400.00. Work just commenced. Expenditure during 1938, \$6,953.00.

Alford-Mt. Washington-Sheffield

~~October~~ 25, 1938, contract made with Forrest Construction Co., of Norwood, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$35,088.15. Work not yet commenced. No expenditure during 1938.

Hubbardston-Royalston

~~October~~ 25, 1938, contract made with John Moran, Inc., of Fitchburg, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$4,700.00. Work about one-half completed. Expenditure during 1938, \$2,379.63.

New Braintree-West Brookfield

~~October~~ 25, 1938, contract made with Charles A. E. LaRose, of Ware, for reconstruction or repairs of bridges, and approaches thereto, on town ways. The proposal amounted to \$32,100.00. Work not yet commenced. No expenditure during 1938.

North Brookfield

~~October~~ 25, 1938, contract made with Austin McDonald, of Boston, for reconstruction or repairs to bridges, and approaches thereto, on town ways. The proposal amounted to \$20,100.00. Work not yet commenced. No expenditure during 1938.

Athol-Westminster

~~October~~ 25, 1938, contract made with Richard White Sons, Inc., of Newton, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$27,900.00. Work not yet commenced. No expenditure during 1938.

Holland

~~October~~ 25, 1938, contract made with C. C. Smith Company, Incorporated, of Cambridge, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$27,500.00. Work not yet commenced. No expenditure during 1938.

Plymouth-Wareham-Marion

~~October~~ 25, 1938, contract made with Harry L. Jones, of Barnstable, for construction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$47,800.00. Work not yet commenced. No expenditure during 1938.

Montgomery

~~October~~ 25, 1938, contract made with P. J. Kennedy & Company, of Holyoke, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$11,000.00. Work about one-fourth completed. Expenditure during 1938, \$3,400.00.



Ashfield-Conway-Deerfield-Plainfield-Savoy-Cheshire-Adams

October 26, 1938, contract made with Kelleher Corporation, of Turners Falls, for reconstruction or repair of town ways. The proposal amounted to \$51,850.24. Work not yet commenced. No expenditure during 1938.

Lee

October 27, 1938, contract made with Farrell & Gregory, of Pittsfield, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$8,039.40. Work not yet commenced. No expenditure during 1938.

Sandisfield

November 1, 1938, contract made with J. J. Callahan, of Boston, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$16,400.00. Work about one-eighth completed. Expenditure during 1938, \$2,231.25.

Florida-Savoy

November 1, 1938, contract made with Dingley Brothers, Inc., of Natick, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$32,300.00. Work not yet commenced. No expenditure during 1938.

New Marlborough

November 2, 1938, contract made with T. A. Pearson Associates, Inc., of Boston, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$18,200.00. Work not yet commenced. No expenditure during 1938.

Westhampton

November 2, 1938, contract made with T. A. Pearson Associates, Inc., of Boston, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$4,700.00. Work not yet commenced. No expenditure during 1938.

Falmouth

November 2, 1938, contract made with B. M. Construction Co. Inc., of Boston, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$23,300.00. Work not yet commenced. No expenditure during 1938.

Ludlow-Wilbraham

November 2, 1938, contract made with Hancock Construction Co., of Boston, for reconstruction or repair of approaches to a bridge, on a town way. The proposal amounted to \$10,000.00. Work about nine-tenths completed. Expenditure during 1938, \$3,899.50.

Tyringham

November 7, 1938, contract made with M. J. Walsh & Sons, of Holyoke, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$15,100.00. Work just commenced. Expenditure during 1938, \$267.75.

Adams-Pittsfield

November 7, 1938, contract made with Lindholm Construction Co. Inc., of Pittsfield, for reconstruction ~~xxxxxx~~ or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$39,500.00. Work just commenced. Expenditure during 1938, \$2,686.00.

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~~424~~  
Ware

November 7, 1938, contract made with Daniel Marr and Son Company, of Boston, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$10,200.00. Work not yet commenced. No expenditure during 1938.

Granville

November 7, 1938, contract made with G. Bonazzoli & Sons, of Hudson, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$6,100.00. Work not yet commenced. No expenditure during 1938.

Charlemont-Hawley-Heath-Rowe

November 7, 1938, contract made with B. A. Gardetto, Inc., of Boston, for repairing town roads and channel excavation. The proposal amounted to \$351,422.45. Work about one-fourth completed. Expenditure during 1938, \$91,341.00.

Williamsburg

November 8, 1938, contract made with Charles I. Hosmer, Inc., of Greenfield, for repairing a bridge and doing miscellaneous work, on town ways, ~~Work completed~~ ~~November 23, 1938~~. The proposal amounted to \$3,700.00. Work completed November 23, 1938. No expenditure during 1938.

Worthington

November 8, 1938, contract made with Sam Failla, of Greenfield, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$5,800.00. Work not yet commenced. No expenditure during 1938.

Marlborough

November 8, 1938, contract made with Peter Salvucci, of Waltham, for reconstruction or repair of a bridge, and approaches thereto, on a city way. The proposal amounted to \$25,500.00. Work not yet commenced. No expenditure during 1938.

Monterey

November 8, 1938, contract made with J. J. Callahan, of Boston, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$16,600.00. Work not yet commenced. No expenditure during 1938.

New Marlborough

November 8, 1938, contract made with Interstate Construction Co. Inc., of Boston, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$21,400.00. Work not yet commenced. No expenditure during 1938.

Templeton

November 15, 1938, contract made with C. J. Sweeney, of Stoneham, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$17,300. Work not yet commenced. No expenditure during 1938.

Westport

November 15, 1938, contract made with James B. Rendle Company, of Malden, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$26,500.00. Work just commenced. Expenditure during 1938, \$527.00.



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~~13~~  
Royalston

November 16, 1938, contract made with John Moran, Inc., of Fitchburg, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$3,700.00. Work not yet commenced. No expenditure during 1938.

Belchertown

November 16, 1938, contract made with Earl M. Carriere Co., of Boston, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$15,500.00. Work not yet commenced. No expenditure during 1938.

Florida

November 16, 1938, contract made with Dingley Brothers, Inc., of Natick, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$3,400.00. Work not yet commenced. No expenditure during 1938.

Worthington

November 22, 1938, contract made with Federal Contracting Company, of Boston, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$113,300.00. Work not yet commenced. No expenditure during 1938.

Lee-Montgomery

November 22, 1938, contract made with Murphy Bros. Corporation, of Boston, for construction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$27,700.00. Work not yet commenced. No expenditure during 1938.

Ashburnham

November 22, 1938, contract made with John Moran, Inc., of Fitchburg, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$2,400.00. Work not yet commenced. No expenditure during 1938.

Huntington

November 22, 1938, contract made with George Venditti, Inc., of Worcester, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$14,600.00. Work not yet commenced. No expenditure during 1938.

Hancock

November 22, 1938, contract made with Louis J. Dee, of Hancock, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$6,300.00. Work not yet commenced. No expenditure during 1938.

Hatfield

November 22, 1938, contract made with Howard L. Smith, of Holyoke, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$22,600.00. Work not yet commenced. No expenditure during 1938.

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Templeton

November 22, 1938, contract made with Hancock Construction Co., of Boston, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$29,800.00. Work not yet commenced. No expenditure during 1938.

Clarksburg-Dalton

November 22, 1938, contract made with ~~Hancock Construction Co.~~ Leone Construction Co., of Worcester, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$9,600.00. Work not yet commenced. No expenditure during 1938.

Hatfield

November 23, 1938, contract made with Howard L. Smith, of Holyoke, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$5,100.00. Work not yet commenced. No expenditure during 1938.

Wilbraham

November 25, 1938, contract made with Fred T. Ley & Co., Inc., of Springfield, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$4,200.00. Work not yet commenced. No expenditure during 1938.

Westhampton

November 25, 1938, contract made with T. A. Pearson Associates, Inc., of Boston, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$10,000.00. Work not yet commenced. No expenditure during 1938.

Tyringham

November 25, 1938, contract made with Town of Tyringham, for repairs to a town way. The proposal amounted to \$5,000.00, the <sup>State</sup> ~~town~~ to pay one-half. Work not yet commenced. No expenditure during 1938.

Becket-Stockbridge

November 29, 1938, contract made with Interstate Construction Co. Inc., of Boston, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$17,000.00. Work not yet commenced. No expenditure during 1938.

Cummington

November 29, 1938, contract made with Casper Ranger Construction Company, of Holyoke, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$28,300.00. Work not yet commenced. No expenditure during 1938.

Ludlow

November 29, 1938, contract made with Hancock Construction Co., of Boston, for channel excavation and reconstruction of a town way. The proposal amounted to \$16,725.00. Work not yet commenced. No expenditure during 1938.

Chesterfield

November 29, 1938, contract made with Antonio Pandiscio, of Fitchburg, for channel excavation and highway protection, in the town of Chesterfield. The proposal amounted to \$12,450.00. Work not yet commenced. No expenditure during 1938.



Rowe

November 29, 1938, contract made with Town of Rowe, for repairs to town roads. The proposal amounted to \$4,000.00. Work not yet commenced. No expenditure during 1938.

Petersham

November 30, 1938, contract made with Daniel Marr and Son Company, of Boston, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$8,600.00. Work not yet commenced. No expenditure during 1938.

Worthington

November 30, 1938, contract made with P. J. Kennedy & Company, of Holyoke, for reconstruction or repair of bridges, and approaches thereto, on town ways. The proposal amounted to \$26,200.00. Work not yet commenced. No expenditure during 1938.

Granby

November 30, 1938, contract made with Marois Bros. Inc., of Worcester, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$5,200.00. Work not yet commenced. No expenditure during 1938.

North Brookfield

November 30, 1938, contract made with Marois Bros. Inc., of Worcester, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$4,800.00. Work not yet commenced. No expenditure during 1938.

Marlborough

November 30, 1938, contract made with Peter Salvucci, of Waltham, for reconstruction or repair of a bridge, and approaches thereto, on a town way. The proposal amounted to \$16,900.00. Work not yet commenced. No expenditure during 1938.

Charlemont

November 30, 1938, contract made with Town of Charlemont, for repairs to town roads. The proposal amounted to \$5,000.00. Work not yet commenced. No expenditure during 1938.

Savoy

November 30, 1938, contract made with Town of Savoy, for repairs to town roads. The proposal amounted to \$3,000.00, the ~~town~~ <sup>State</sup> to pay ~~one~~ <sup>two</sup> thirds. Work not yet commenced. No expenditure during 1938.

Chesterfield

November 30, 1938, contract made with Town of Chesterfield, for repairs to town roads. The proposal amounted to \$1,000.00. Work not yet commenced. No expenditure during 1938.

Alford

November 30, 1938, contract made with Town of Alford, for repairs to town roads. The proposal amounted to \$1,000.00. Work not yet commenced. No expenditure during 1938.

Heath

~~November~~ 30, 1938, contract made with Town of Heath, for repairs to town roads. The proposal amounted to \$3,000.00. Work not yet commenced. No expenditure during 1938.

Mt. Washington

~~November~~ 30, 1938, contract made with Town of Mt. Washington, for repairs to a town road. The proposal amounted to \$6,500.00. Work not yet commenced. No expenditure during 1938.

Winchendon

~~November~~ 30, 1938, contract made with Town of Winchendon, for repairs to town roads. The proposal amounted to \$1,000.00. Work not yet commenced. No expenditure during 1938.

*FLOOD REPLACEMENT PROJECTS, STATE HIGHWAYS*

(State Highways)

In accordance with the provisions of Chapter 505, Item B, of the Acts of 1938, the following contracts were entered into:-

Northampton-Williamsburg-Goshen-Cummington

~~September~~ 30, 1938, contract made with Charles I. Hosmer, Inc., of Greenfield, for repairs to State highways. The proposal amounted to \$156,310.26. Work about one-fourth completed. Expenditure during 1938, \$35,733.48.

Northfield

~~September~~ 30, 1938, contract made with Charles I. Hosmer, Inc., of Greenfield, for removing trees, stumps and parts of trees, on State highways. The proposal amounted to \$30,000.00. Work about four-fifths completed. Expenditure during 1938, \$24,395.00.

Athol-Petersham-Barre-Orange-

New Salem-Shutesbury-Pelham-Belchertown-Granby-South Hadley

~~September~~ 30, 1938, contract made with Charles I. Hosmer, Inc., of Greenfield, for removing trees, stumps and parts of trees, on State highways. The proposal amounted to \$200,000.00. Work about three-fourths completed. Expenditure during 1938, \$129,477.19.

Becket-Otis-Sandisfield-Tolland

~~October~~ 3, 1938, contract made with Lindholm Construction Co. Inc., of Pittsfield, for repairs to State highways. The proposal amounted to \$15,850.00. Work about one-half completed. Expenditure during 1938, \$8,533.82.

Williamstown-New Ashford

~~October~~ 3, 1938, contract made with Lindholm Construction Co. Inc., of Pittsfield, for repairs to State highways. The proposal amounted to \$26,327.10. Work about one-third completed. Expenditure during 1938, \$9,440.52.



Windsor-Dalton-Pittsfield

October 3, 1938, contract made with Lindholm Construction Co., Inc., of Pittsfield, for repairs to State highways. The proposal amounted to \$29,303.00. Work about one-third completed. Expenditure during 1938, \$11,601.32.

Southboro<sup>ah</sup>-Westboro<sup>ah</sup>-Northboro<sup>ah</sup>-Shrewsbury-Leicester-Spencer-W. Brookfield-Brookfield-W. Brookfield-Warren-Palmer

October 3, 1938, contract made with John P. Condon Corporation, of Watertown, for repairs to State highways. The proposal amounted to \$75,850.60. Work about one-third completed. Expenditure during 1938, \$24,518.83.

Paxton-Barre-Rutland-Oakham-Worcester

October 3, 1938, contract made with John P. Condon Corporation, of Watertown, for repairs to State highways. The proposal amounted to \$53,924.80. Work about one-half completed. Expenditure during 1938, \$26,967.05.

West Springfield-Westfield

October 3, 1938, contract made with Daniel O'Connell's Sons, Inc., of Holyoke, for repairs to State highways. The proposal amounted to \$23,582.50. Work about three-fifths completed. Expenditure during 1938, \$13,012.95.

Sunderland-Amherst-South Hadley-Granby

October 3, 1938, contract made with Daniel O'Connell's Sons, Inc., of Holyoke, for repairs to State highways. The proposal amounted to \$22,325.00. Work about one-half completed. Expenditure during 1938, \$12,462.50.

Greenfield-Shelburne-Buckland-Charlemont

October 3, 1938, contract made with Daniel O'Connell's Sons, Inc., of Holyoke, for repairs to State highways. The proposal amounted to \$20,775.00. Work about one-third completed. Expenditure during 1938, \$7,915.17.

Northfield-Erving-Montague

October 3, 1938, contract made with Daniel O'Connell's Sons, Inc., of Holyoke, for repairs to State highways. The proposal amounted to \$14,080.00. Work just commenced. Expenditure during 1938, \$1,151.75.

Chicopee

October 3, 1938, contract made with Central Construction Company, of Boston, for repairs to State highway. The proposal amounted to \$159,012.50. Work about one-fifth completed. Expenditure during 1938, \$31,319.30.

Winchendon-Ashburnham-Westminster-Leominster-Sterling-W. Boylston-Worcester-Gardner-Templeton-Lancaster-Princeton

October 3, 1938, contract made with Central Construction, of Boston, for repairs to State highway. The proposal amounted to \$113,230.25. Work practically completed. Expenditure during 1938, \$118,717.65.

Buckland-Ashfield

October 3, 1938, contract made with Kelleher Corporation, of Turners Falls, for repairs to State highway. The proposal amounted to \$33,521.66. Work about one-half completed. Expenditure during 1938, \$16,531.65.

Ashfield-Conway-Deerfield

October 3, 1938, contract made with Kelleher Corporation, of Turners Falls, for repairs to State highways. The proposal amounted to \$132,307.15. Work about one-half completed. Expenditure during 1938, \$70,278.34.

Greenfield-Gill-Erving-Orange

October 3, 1938, contract made with Continental Construction Co., of Lawrence, for repairs to State highways. The proposal amounted to \$38,821.30. Work practically completed. Expenditure during 1938, \$34,826.87.

Athol-Phillipston-Templeton-Gardner-Westminster-Fitchburg-Lunenburg

October 3, 1938, contract made with P. J. Keating Company, of Fitchburg, for repairs to State highways. The proposal amounted to \$49,896.75. Work about one-half completed. Expenditure during 1938, \$26,198.13.

Orange-New Salem-Shutesbury-

Pelham-Belchertown-Granby-South Hadley

October 3, 1938, contract made with John Deveney Co., of Boston, for repairs to State highways. The proposal amounted to \$40,400.00. Work completed November 23, 1938. Expenditure during 1938, \$3,429.75.

Worcester County

October 3, 1938, contract made with Coleman Bros. Corporation, of Boston, for removing trees, stumps and parts of trees, on State highways. The proposal amounted to \$26,000.00. Work about one-fourth completed. Expenditure during 1938, \$7,956.88.

Norfolk and Bristol Counties

October 3, 1938, contract made with John Deveney Co., of Boston, for removing trees, stumps and parts of trees, on State highways. The proposal amounted to \$9,900.00. Work practically completed. Expenditure during 1938, \$10,922.50.

Middlesex County

October 3, 1938, contract made with George A. Baker Company, of Boston, for removing trees, stumps and parts of trees, on State highways. The proposal amounted to \$113,500.00. Work about two-fifths completed. Expenditure during 1938, \$77,265.00.

Great Barrington

October 4, 1938, contract made with The Lane Construction Corporation, of Meriden, Connecticut, for <sup>repairs to</sup> ~~repairing~~ State highway. The proposal amounted to \$26,400.00. Work about one-half completed. Expenditure during 1938, \$12,754.08.

Lee

October 4, 1938, contract made with The Lane Construction Corporation, of Meriden, Connecticut, for repairs to State highway. The proposal amounted to \$18,816.00. Work completed October 26, 1938. Expenditure during 1938, \$14,115.13.

Northboro<sup>sh</sup>-Shrewsbury-Worcester-Millbury-Auburn-

Oxford-Charlton-Sturbridge-Brimfield-Monson-Palmer-Dudley-Southbridge

October 4, 1938, contract made with C. & R. Construction Company, of Boston, for repairs to State highway. The proposal amounted to \$51,649.19. Work about one-fifth completed. Expenditure during 1938, \$11,023.49.

~~Millbury~~



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Millbury-Uxbridge-Blackstone-Milford-Grafton-  
Mendon-Upton-Hopedale-Northbridge-Millville

~~October~~ 4, 1938, contract made with C. & R. Construction Company, of Boston, for repairs to State highways. The proposal amounted to \$31,849.20. Work just commenced. Expenditure during 1938, \$2,435.25.

Auburn-Oxford-Webster-Dudley-Millbury-Sutton-Douglas-  
Brimfield-Wales-Sturbridge-Palmer-Monson

~~October~~ 4, 1938, contract made with C. & R. Construction Company, of Boston, for repairs to State highways. The proposal amounted to \$37,043.10. Work practically completed. Expenditure during 1938, \$37,576.84.

Millbury-Worcester-Holden-Rutland

~~October~~ 5, 1938, contract made with John P. Condon Corporation, of Watertown, for repairs to State highway. The proposal amounted to \$26,840.75. Work about one-half completed. Expenditure during 1938, \$12,913.82.

Millbury-Sutton-Douglas

~~October~~ 5, 1938, contract made with C. & R. Construction Company, of Boston, for repairs to State highways. The proposal amounted to \$14,630.00. Work about three-sevenths completed. Expenditure during 1938, \$6,355.01.

Webster

~~October~~ 5, 1938, contract made with C. & R. Construction Company, of Boston, for repairs to State highway. The proposal amounted to \$1,906.00. Work not yet commenced. No expenditure during 1938.

Athol-Petersham

~~October~~ 5, 1938, contract made with P. J. Keating Company, of Fitchburg, for repairs to State highway. The proposal amounted to \$23,671.00. Work ~~about one-half~~ <sup>practically</sup> completed. Expenditure during 1938, \$12,261.25.

Palmer-Monson

~~October~~ 5, 1938, contract made with Coleman Bros. Corporation, of Boston, for construction of a temporary bridge, on State highway. The proposal amounted to \$22,300.00. Work completed October 19, 1938. Expenditure during 1938, \$18,955.00.

Barre

~~October~~ 6, 1938, contract made with James B. Rendle Company, of Malden, for construction of a temporary bridge, on State highway. The proposal amounted to \$12,850.00. Work completed October 17, 1938. Expenditure during 1938, \$10,922.50.

Adams

~~October~~ 6, 1938, contract made with S. W. Meneguale, of Stockbridge, for repairs to State highway. The proposal amounted to \$53,750.00. Work about three-fifths completed. Expenditure during 1938, \$31,478.10.

Williamstown

~~October~~ 7, 1938, contract made with David M. Deans, of Williamstown, for construction of a temporary bridge, on State highway. The proposal amounted to \$6,934.92. Work completed November 22, 1938. Expenditure during 1938, \$5,894.68.

Dudley

October 7, 1938, contract made with T. Stuart & Son Company, of Watertown, for construction of a temporary bridge, on State highway. The proposal amounted to \$10,900.00. Work completed October 22, 1938. Expenditure during 1938, \$9,265.00.

Athol-Phillipston-Lunenburg-

Templeton-Gardner-Fitchburg-Westminster

October 11, 1938, contract made with Devery & Peel, of Canton, for removing trees, stumps and parts of trees, on State highway. The proposal amounted to \$35,925.00. Work about five-sevenths completed. Expenditure during 1938, \$23,327.50.

Brimfield

October 11, 1938, contract made with Frank J. Shields, Incorporated, of Southbridge, for reconstruction or repair of a bridge, and approaches thereto, on State highway. The proposal amounted to \$21,721.00. Work about one-fourth completed. Expenditure during 1938, \$5,257.25.

Templeton

October 11, 1938, contract made with M. F. Gaddis, Inc., of Boston, for reconstruction or repair of a bridge, and approaches thereto, on State highway. The proposal amounted to \$23,902.20. Work about one-fifth completed. Expenditure during 1938, \$5,657.73.

Oakham

October 11, 1938, contract made with Engineering Service & Construction Company, of Boston, for reconstruction or repair of a bridge, and approaches thereto, on State highway. The proposal amounted to \$37,431.75. Work about one-fourth completed. Expenditure during 1938, \$8,772.00.

Dalton-Hinsdale-Washington-Becket

October 13, 1938, contract made with Lindholm Construction Co. Inc., of Pittsfield, for repairs to State highways. The proposal amounted to \$24,505.60. Work about one-eighth completed. Expenditure during 1938, \$3,276.80.

Florida-Savoy-Charlemont

October 14, 1938, contract made with C. J. Maney Co. Inc., of Boston, for repairs to State highways. The proposal amounted to \$517,336.04. Work about one-tenth completed. Expenditure during 1938, \$47,574.50.

Charlemont

October 14, 1938, contract made with C. J. Maney Co. Inc., of Boston, for repairs to State highway. The proposal amounted to \$270,125.82. Work about two-fifths completed. Expenditure during 1938, \$98,561.75.

Lee

October 18, 1938, contract made with The Lane Construction Corporation, of Meriden, Connecticut, for reconstruction or repair of a bridge, and approaches thereto, on State highway. The proposal amounted to \$35,000.00. Work about one-fifth completed. Expenditure during 1938, \$7,746.47.

Chilmark

October 18, 1938, contract made with Turner & Breivogel, of Falmouth Heights, for reconstruction or repair of a bridge, and approaches thereto, on State highways. The proposal amounted to \$14,200.00. Work just commenced. Expenditure during 1938, \$765.00.



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~~21~~  
Warren

~~October~~ 18, 1938, contract made with Frank J. Shields, Incorporated, of Southbridge, for reconstruction or repair of a bridge, and approaches thereto, on a State highway. The proposal amounted to \$14,900.00. Work not yet commenced. No expenditure during 1938.

Somerset

~~October~~ 18, 1938, contract made with Montaup Sand and Gravel Company, of Swansea, for repairs to State highway. The proposal amounted to \$20,275.00. Work about one-third completed. Expenditure during 1938, \$7,808.95.

Lee-Becket-Chester-Huntington-Russell-Worthington

~~October~~ 19, 1938, contract made with B. Perini & Sons, Inc., of Framingham, for repairs to State highways. The proposal amounted to \$699,267.52. Work about one-fifth completed. Expenditure during 1938, \$153,917.46

Blandford-Russell

~~October~~ 19, 1938, contract made with Hancock Construction Co., of Boston, for repairs to State highway. The proposal amounted to \$12,587.48. Work about three-fifths completed. Expenditure during 1938, \$8,584.03.

Monson-Palmer

~~October~~ 21, 1938, contract made with Coleman Bros. Corporation, of Boston, for reconstruction or repair of a bridge, and approaches thereto, on State highway. The proposal amounted to \$75,800.00. Work just commenced. Expenditure during 1938, \$4,951.25.

Agawam-Belchertown-Ware

~~October~~ 21, 1938, contract made with Devery & Peel, of Canton, for removing trees, stumps and parts of trees, on State highways. The proposal amounted to \$11,250.00. Work practically completed. Expenditure during 1938, \$10,748.25.

Barre

~~October~~ 24, 1938, contract made with C. & R. Construction Company, of Boston, for reconstruction or repair of a bridge, and approaches thereto, on State highway. The proposal amounted to \$58,900.00. Work just commenced. Expenditure during 1938, \$935.00.

North Adams

~~October~~ 24, 1938, contract made with A. J. Maxymillian, Inc., of North Adams, for restoring Hoosic River to its normal channel and removing all debris and fallen trees from said River. The proposal amounted to \$18,150.00. Work about two-thirds completed. Expenditure during 1938, \$12,112.50.

Conway

~~October~~ 24, 1938, contract made with Daniel O'Connell's Sons, Inc., of Holyoke, for reconstruction or repair of a bridge, and approaches thereto, on State highway. The proposal amounted to \$23,400.00. Work not yet commenced. No expenditure during 1938.

Buckland

~~October~~ 24, 1938, contract made with Kelleher Corporation, of Turners Falls, for reconstruction or repair of bridges, and approaches thereto, on State highways. The proposal amounted to \$111,800.00. Work just commenced. Expenditure during 1938, \$170.00.

Sturbridge

~~October~~ 24, 1938, contract made with R. J. Connolly, Inc., of Boston, for reconstruction or repair of a bridge, and approaches thereto, on State highway. The proposal amounted to \$21,000.00. Work about one-fifth completed. Expenditure during 1938, \$4,806.75.

Dudley

~~October~~ 24, 1938, contract made with T. Stuart & Son Company, of Watertown, for reconstruction or repair of a bridge, and approaches thereto, on State highway. The proposal amounted to \$90,800.00. Work just commenced. Expenditure during 1938, \$1,487.50.

Chester

~~October~~ 24, 1938, contract made with Frank T. Westcott, of North Attleboro, for reconstruction or repair of a bridge, and approaches thereto, on State highway. The proposal amounted to \$3,900.00. Work not yet commenced. No expenditure during 1938.

Wayland

~~October~~ 25, 1938, contract made with Bell Bros. Inc., of Waltham, for repairs to State highway. The proposal amounted to \$10,790.00. Work about two-fifths completed. Expenditure during 1938, \$4,223.65.

Charlemont

~~October~~ 25, 1938, contract made with C. J. Maney Co. Inc., of Somerville, for reconstruction or repair of a bridge, and approaches thereto, on State highway. The proposal amounted to \$43,200.00. Work about two-fifths completed. Expenditure during 1938, \$19,964.37.

Worthington

~~October~~ 25, 1938, contract made with Sam Failla, of Greenfield, for reconstruction or repair of bridges, and approaches thereto, on State highways. The proposal amounted to \$12,700.00. Work not yet commenced. No expenditure during 1938.

Vicinity of Fitchburg

~~October~~ 25, 1938, contract made with Rollstone Sales Corporation, of Fitchburg, for repairs to State highways. The proposal amounted to \$88,100.00. Work about one-fifth completed. Expenditure during 1938, \$13,257.30.

District 7

~~October~~ 25, 1938, contract made with Louis A. Byrne, of Dennisport, for installing riprap, on State highways. The proposal amounted to \$87,500.00. Work about one-ninth completed. Expenditure during 1938, \$10,200.00.

North Brookfield

~~October~~ 25, 1938, contract made with C. C. Smith Company, Incorporated, of Cambridge, for reconstruction or repair of a bridge, and approaches thereto, on State highway. The proposal amounted to \$6,300.00. Work not yet commenced. No expenditure during 1938.

Ashburnham

~~November~~ 1, 1938, contract made with Rome Construction Company, of Holden, for repairs to State highway. The proposal amounted to \$10,424.00. Work about two-fifths completed. Expenditure during 1938, \$4,279.75.



Cumington

November 1, 1938, contract made with Charles I. Hosmer, Inc., of Greenfield, for reconstruction or repair of a bridge, and approaches thereto, on State highway. The proposal amounted to \$146,700.00. Work not yet commenced. No expenditure during 1938.

District 6

November 12, 1938, contract made with Thomas J. Godvin, of Boston, for repairs to trees, on State highways. The proposal amounted to \$5,124.00. Work not yet commenced. No expenditure during 1938.

Cheshire-Lanesboro-Lenox

November 15, 1938, contract made with Lindholm Construction Co. Inc., of Pittsfield, for reconstruction of State highways. The proposal amounted to \$19,853.51. Work not yet commenced. No expenditure during 1938.

Conway

November 29, 1938, contract made with Kelleher Corporation, of Turners Falls, for reconstruction of a temporary bridge, on State highway. The proposal amounted to \$4,100.00. Work not yet commenced. No expenditure during 1938.

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In accordance with the provisions of Chapter 505, Items A and B, of the Acts of 1938, the following contracts ~~were~~<sup>were</sup> entered into:--

Blandford-Otis

October 24, 1938, contract made with L. D. Phillips Construction Co., of Westfield, for reconstruction or repair of bridges, and approaches thereto, in the towns of Blandford and Otis. The proposal amounted to \$52,300.00. Work not yet commenced. No expenditure during 1938.

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In accordance with the provisions of Chapter 505, Item B, and Chapter 506, of the Acts of 1938, the following contract was entered into:--

Huntington-Russell-Worthington

November 30, 1938, contract made with B. Perini & Sons, Inc., of Framingham, for channel excavation in the Westfield River. The proposal amounted to \$150,000.00. Work not yet commenced. No expenditure during 1938.

***IMPROVEMENT OF RIVERS AND STREAMS MADE NECESSARY BY HURRICANE AND FLOOD***

In accordance with the provisions of Chapter 506, of the Acts of 1938, the following contracts were entered into:--

Pittsfield

November 7, 1938, contract made with Lindholm Construction Co. Inc., of Pittsfield, for excavating a channel, on State highway, in the city of Pittsfield. The proposal amounted to \$2,460.00. Work not yet commenced. No expenditure during 1938.

Engineering Services

November 21, 1938, contract made with Moore & Haller, of Cambridge, for hydraulic engineering services. The proposal amounted to \$105,000.00. Work not

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Sutton

November 15, 1938, contract made with C. & R. Construction Company, of Boston, for clearing a channel in Mumford River, in the town of Sutton. The proposal amounted to \$10,700.00. Work not yet commenced. No expenditure during 1938.

Great Barrington

November 29, 1938, contract made with Interstate Construction Co. Inc., of Boston, for channel excavation and shore protection, in the town of Great Barrington. The proposal amounted to \$3,900.00. Work not yet commenced. No expenditure during 1938.

New Marlborough

November 30, 1938, contract made with T. A. Pearson Associates, Inc., of Boston, for channel excavation, in the town of New Marlboro<sup>gh</sup>. The proposal amounted to \$6,750.00. Work not yet commenced. No expenditure during 1938.

Russell

November 30, 1938, contract made with B. Perini & Sons, Inc., of Framingham, for constructing a dike, in the town of Russell. The proposal amounted to \$32,330.00. Work not yet commenced. No expenditure during 1938.

*CHAPTER 464, ACTS OF 1935, (BOND ISSUE)*

(Bond Issue)

In accordance with the provisions of Chapter 464 of the Acts of 1935, the following contracts were entered into:-

Edgartown-Oak Bluffs

January 11, 1938, contract made with W. G. Manter Co., of Vineyard Haven, for constructing an extension of a timber pile bridge over Sengekontacket Pond. The proposal amounted to \$2,082.10. Work completed April 15, 1938. Expenditure during 1938, \$2,058.74.

Stoughton

June 30, 1938, contract made with Builders Iron Works, of Boston, for raising and resetting a wrought iron fence at the Evergreen Cemetery on Washington Street. The proposal amounted to \$695.00. Work completed August 5, 1938. Expenditure during 1938, \$695.00.

Adams

October 11, 1938, contract made with Town of Adams, for constructing a channel for the Hoosic River, and incidental work. The proposal amounted to \$10,660.00, the ~~tax to be paid 73.54 per cent. to pay 86.46 per cent.~~ State to pay 73.54 per cent. Work practically completed. Expenditure during 1938, \$8,460.92.



## ABOLITION OF GRADE CROSSING

(General Laws, Section 70, Chapter 159, as amended by Section 1,  
Chapter 357 of the Acts of 1934)

The following contract was entered into for the abolition of a grade crossing:

August 24, 1938, contract made with Coleman Brothers Corporation of Boston, for reconstructing about 1,856 feet of State highway on Rogers Street in Lowell, and 12,451 feet of State highway on Main Street and new location in Tewksbury, and constructing a steel stringer bridge with concrete deck over the Lowell Branch of the Boston and Maine Railroad in Tewksbury, the surface consisting of bituminous concrete. The proposal amounted to \$189,896.80. Work about one fifth completed. Expenditure during 1938, \$35,359.79.

## MISCELLANEOUS CONTRACTS

The Department entered into the following contracts for miscellaneous work:--

### Mansfield-Sharon

March 16, 1938, contract ~~made with~~ <sup>made with</sup> Chandler Construction Company, Inc., of Boston, for constructing two pedestrian <sup>concrete</sup> underpasses and incidental roadway work under the New York, New Haven and Hartford Railroad on Elm Street, in Mansfield, and on Garden Street, in Sharon. The proposal amounted to \$32,556.73. Work about one-third completed. Expenditure during 1938, \$11,575.77.

### Newburyport-Salisbury

March 22, 1938, contract made with Vulcan Construction Co., of Boston, for repairing a bridge over the Merrimac River, on Automobile Route No. 1. The proposal amounted to \$1,888.00. Work completed May 19, 1938. Expenditure during 1938, \$1,903.25.

### Middleborough

April 20, 1938, contract made with New England Steel Tank Company, of Boston, for furnishing and erecting a new smoke stack and flue pipe at the Massachusetts Department of Public Works' Storehouse. The proposal amounted to \$325.00. Work completed May 31, 1938. Expenditure during 1938, \$325.00.

### District 6

April 20, 1938, contract made with ~~The F. A. Bartlett Tree Expert Co.~~ <sup>The F. A. Bartlett Tree Expert Company</sup> of Cambridge, for spraying roadside growth along the State highway in fifteen (15) towns in Norfolk and Bristol Counties. The proposal amounted to \$1,286.40. Work completed May 31, 1938. Expenditure during 1938, \$1,719.48.

### District 6

April 20, 1938, contract made with The F. A. Bartlett Tree Expert <sup>Company</sup> ~~Co.~~, of Cambridge, for spraying roadside growth along the State highway in sixteen (16) towns in Norfolk and Bristol Counties. The proposal amounted to \$1,500.80. Work completed May 21, 1938. Expenditure during 1938, \$1,679.96.

### Districts 1 and 2

April 20, 1938, contract made with The F. A. Bartlett Tree Expert <sup>Company</sup> ~~Co.~~, of Cambridge, for spraying roadside growth along the State highway in eleven (11) towns in Berkshire, Franklin and Hampden Counties. The proposal ~~amounted to~~ <sup>amounted to</sup> \$1,192.60. Work completed May 18, 1938. Expenditure during 1938, \$1,256.80.

### District 7

April 20, 1938, contract made with The F. A. Bartlett Tree Expert Company, of Cambridge, for spraying roadside growth along the State highway in seven (7) towns in Barnstable and Plymouth Counties. The proposal amounted to \$857.60. Work completed June 7, 1938. Expenditure during 1938, \$1,433.60.

### Lowell

May 6, 1938, contract made with Frederick W. Byron, of Cambridge, for removing a temporary bridge over the Merrimack River and restoring the site. The proposal amounted to \$4,405.00. Work completed June 22, 1938. Expenditure during 1938, \$3,345.86.

### Millbury-Sutton

May 17, 1938, contract made with Municipal Signal & Supply Company, of Boston, for furnishing and installing traffic control signals. The proposal amounted to \$2,441.50. Work completed June 22, 1938. Expenditure during 1938, \$2,441.50.



Lee-Sheffield

September 20, 1938, contract made with Maurice M. Devine, Inc., of Boston, for ~~mix~~ cleaning and painting one bridge on Route 20 over the Housatonic River, in Lee, and one bridge on Route 7 over the Housatonic River, in Sheffield. The proposal amounted to \$750.00. Work not yet commenced. No expenditure during 1938.

Sandisfield

September 20, 1938, contract made with Maurice M. Devine, Inc., of Boston, for cleaning and painting three bridges, on Auto Route No. 8 over the Farmington River. The proposal amounted to \$1,325.00. Work not yet commenced. No expenditure during 1938.

Westfield

September 20, 1938, contract made with Maurice M. Devine, Inc., of Boston, for ~~subcontractor~~ cleaning and painting a bridge on Route 20 over the Westfield River. The proposal amounted to \$2,678.00. Work completed November 11, 1938. Expenditure during 1938, \$2,277.15.

Athol

October 11, 1938, contract made with B. A. Gardetto, Inc., of Boston, for constructing about 719.25 feet of highway on Main Street, and constructing a steel through plate girder bridge with a concrete deck to carry Main Street over the Boston and Maine Railroad, the surface consisting of bituminous concrete. ~~surface~~ The proposal amounted to \$89,629.50. Work not yet commenced. No expenditure during 1938.

Falmouth

October 27, 1938, contract made with S. Rotondi & Sons, of Stoneham, for constructing about 5,965 feet of highway on new location, the surface consisting of bituminous concrete. The proposal amounted to ~~\$62,785.90~~ \$62,785.90. Work just commenced. Expenditure during 1938, \$1,370.20.

Boston-Milton

October 27, 1938, contract made with Municipal Signal & Supply Company, of Boston, for furnishing and installing traffic control signals at the junction of Brush Hill Road and Blue Hill Avenue, in Milton, and at the junction of Water Street and Fairmount Avenue, in Boston. The proposal amounted to \$6,502.00. Work not yet commenced. No expenditure during 1938.

Newburyport

November 2, 1938, contract made with Thomas W. Watkins & ~~Son~~ Son, Incorporated, of Amesbury, for constructing a steel stringer bridge with concrete deck, and approaches thereto, on High Street, over the Boston and Maine Railroad, Portland Division City Branch, the surface ~~consisting~~ of the approaches consisting of bituminous concrete. The proposal amounted to \$13,745.00. Work not yet commenced. No expenditure during 1938.

Auto List

November 29, 1938, contract made with Direct Mail Service, Inc., of Boston, for furnishing a list of the 1939 Automobile registrations. The contract amounted to \$2,500.00.

Public Works Building

November 29, 1938, contract made with Sneed and Company, of Boston, for furnishing and erecting steel office partitions on the basement floor of the office building of the Department of Public Works, 100 Nashua Street, Boston. The proposal amounted to \$627.00. Work not yet commenced. No expenditure during 1938.

November 29, 1938, contract made with M. B. Foster Electric Company of Boston, for repairing and installing a ventilating fan in the laboratory of the Department of Public Works, 100 Nashua Street, Boston. The proposal amounted to \$96.00. Work not yet commenced. No expenditure during 1938.



# EXPENDITURES FOR EMERGENCY PUBLIC WORKS CONSTRUCTION

## Chapter 365, Acts of 1933

Acts of 1933

(An act enabling the commonwealth to secure certain benefits provided by the National Industrial Recovery Act)

R-1	Lynn-Revere	\$34,270.57	
R-5-1	Arlington-Belmont-Lexington	43,679.31	
R-8	Brookline	822.14	
R-51	Braintree-Randolph	2,791.41	\$81,563.43

were: The expenditures during the year in various counties

Essex County	\$17,135.29	Norfolk	\$ 3,613.55
Middlesex	43,679.31	Suffolk	17,135.28
		Total	\$81,563.43

Essex County-Lynn \$17,135.29

Middlesex County - Arlington, \$15,000.00; Belmont, \$15,000.00; Lexington, \$13,679.31

Norfolk County-Braintree, \$1,291.41; Brookline, \$822.14; Randolph, \$1,500.00

Suffolk County - Revere \$17,135.28

## BOND ISSUE PROJECTS

### Chapter 464, Acts of 1935

Acts of 1935

An Act providing a public works program for the purpose of alleviating existing conditions resulting from unemployment.

Class 1 Projects - Highway projects carried out by cities and towns-None.  
Class 2 Projects - Construction of sidewalks.

The expenditures during the year in the various counties were:

Dukes	\$2,436.26	Norfolk	3,002.54
Essex	1,130.43	Plymouth	1,519.77
Middlesex	850.00	Worcester	149.56
		Total	\$9,088.56
		Engineering	25.52 \$ 9,114.08

Details of the foregoing expenditures follow:

Dukes County-Edgartown, \$2,228.69; Oak Bluffs, \$207.57  
Essex County-Essex, \$1,130.43  
Middlesex County-Arlington, \$750.00; Medford, \$100.00  
Norfolk County-Randolph, \$7.45; Stoughton, \$2,995.09  
Plymouth County-Hingham, \$294.40; Wareham, \$1,225.37  
Worcester County-Shrewsbury, \$149.56

Class 3 Projects-Highway Projects under the Hayden-Cartwright Act.

The expenditures during the year in various counties were:-

Barnstable,	16.43	Middlesex,	621.36
Berkshire,	39,364.25	Norfolk,	3,107.40
Essex,	290,652.69	Plymouth,	1,344.64
Hampden,	34,276.16	Worcester,	45,179.26
			<hr/>
			\$ 414,562.19

Details of the foregoing expenditures follow:-

Barnstable County:- Bourne, \$16.43

Berkshire County:- Pittsfield, \$39,364.25

Essex County:- Lynnfield, \$41,687.36; Saugus, \$248,965.33.

Hampden County:- Holyoke, \$34,276.16

Middlesex County:- Arlington, \$462.73; Belmont, \$102.65; Cambridge, \$55.98.

Norfolk County:- Cohasset, \$2,491.72; Foxboro<sup>h</sup>, \$87.98; Norwood, \$131.69; Plainville, \$112.67; Sharon, \$53.93; Walpole, \$99.19; Westwood, \$47.72; Wrentham, \$82.50.

Plymouth County:- Hingham, \$598.47; Scituate \$746.17

Worcester County:- Millbury, \$35,011.33; Sutton, \$10,167.93.



Class 4 Projects-Grade Crossing eliminations, highway projects, maintenance of State Highways.

The expenditures during the year in the various counties were:-

Barnstable	\$ 1,951.36	Hampshire	\$ 204,952.51
Berkshire	27,392.76	Middlesex	5,525.92
Bristol	112,074.42	Norfolk	238,202.85
Essex	313,102.75	Plymouth	14,735.63
Franklin	796,341.48	Worcester	176,756.67
Hampden	9,384.43	<u>Total</u>	<u>\$1,900,420.78</u>
		Maintenance	38,642.36
		Planning survey	53,755.45
			<u>\$1,992,798.59</u>

Details of the foregoing expenditures follows-

Barnstable County.- Bourne, \$1,725.40; Falmouth, \$225.96.

Berkshire County.- Adams, \$6,350.91; Cheshire, \$2,909.12; Lanesboro, \$796.77; Sheffield, \$17,335.96.

Bristol County.- Attleboro, \$19,719.44; Dartmouth, \$9,375.76; Mansfield, \$57,383.02; North Attleboro, \$24,920.76; Westport, \$675.44.

Essex County.- Lawrence, \$45.03; Lynn, \$25.00; Lynnfield, \$79,703.33; Newbury, \$16,957.97; Peabody, \$66,624.30; Saugus, \$149,749.12.

Franklin County.- Deerfield, \$184,310.04; Greenfield, \$11,050.98; Gill, \$135,777.61; Montague, \$344,491.69; Sunderland, \$120,711.16.

Hampden County.- Holyoke, \$129.67; Monson, \$9,254.76.

Hampshire County.- Amherst, \$9.72; Huntington, \$204,942.79.

Middlesex County.- Ayer, \$85.76; Hopkinton, \$5,110.27; Lowell, \$150.00; Waltham, \$179.89.

Norfolk County.- Braintree, \$115,401.35; Canton, \$4,841.82; Foxboro, \$53,208.29; Norwood, \$198.54; Plainville, \$15,386.95; Quincy, \$3,314.80; Sharon, \$44,420.19; Westwood, \$648.54; Weymouth, \$782.37.

Plymouth County.- Marshfield, \$7,347.92; Pembroke, \$7,327.61; West Bridgewater, \$60.10.

Worcester County.- Ashburnham, \$16,887.77; Clinton, \$17,684.78; Lunenburg, \$54.09; Milford, \$52,333.69; Millbury, \$9,182.53; Sterling, \$924.45; Sutton, \$1,056.54; Westboro, \$11,579.06; Worcester, \$67,053.76.

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EXPENDITURES FOR CONSTRUCTION AND REPAIR OF STATE HIGHWAYS  
DAMAGED BY FLOODS  
Chapter 186, Acts of 1936

The expenditures during 1938 in the various counties  
were:

Franklin	\$2,734.36	
Worcester	<u>7,458.16</u>	
Total	10,192.52	
Engineering	<u>221.11</u>	\$10,413.63

Details of the foregoing expenditures follow:

Franklin County-Buckland, \$54.69; Charlemont, \$54.69;  
Erving, \$1,312.49; Gill, \$1,312.49.

Worcester County-Fitchburg, \$1,288.43; Sutton, \$1,193.51;  
Winchendon, \$4,976.22.



# MAINTENANCE AND REPAIR OF STATE HIGHWAYS

## Section 13, Chapter 81, General Laws

The expenditures during the year in various counties were:

Barnstable	\$ 40,482.66	Hampshire	\$ 66,987.75
Berkshire	131,553.77	Middlesex	376,324.54
Bristol	163,619.57	Nantucket	1,116.13
Dukes	8,523.15	Norfolk	411,272.19
Essex	242,215.00	Plymouth	112,220.52
Franklin	75,290.88	Suffolk	96,985.55
Hampden	81,564.65	Worcester	257,772.50
		Total,	\$2,066,928.86

Details of the foregoing expenditures follow:-

**BARNSTABLE COUNTY.**- Barnstable, \$5,639.41; Bourne, \$7,222.80; Brewster, \$1,894.90; Chatham, \$995.75; Dennis, \$901.19; Eastham, \$927.60; Falmouth, \$3,994.14; Harwich, \$1,631.15; Mashpee, \$1,661.74; Orleans, \$1,068.26; Provincetown, \$1,448.56; Sandwich, \$8,039.00; Truro, \$1,668.50; Wellfleet, \$1,401.94; Yarmouth, \$1,987.72.

**BERKSHIRE COUNTY.**- Adams, \$761.75; Becket, \$9,656.36; Cheshire, \$3,236.63; Clarksburg, \$5,577.05; Dalton, \$4,756.16; Egremont, \$2,104.68; Florida, \$1,963.85; Great Barrington, \$10,894.10; Hancock, \$4,045.38; Hinsdale, \$2,046.99; Lanesboro, \$4,022.65; Lee, \$10,132.60; Lenox, \$2,024.49; New Ashford, \$4,184.26; New Marlboro, \$20.64; North Adams, \$4,227.47; Otis, \$3,384.23; Pittsfield, \$6,801.70; Richmond, \$1,213.19; Sandisfield, \$6,064.54; Savoy, \$11,468.47; Sheffield, \$5,980.02; Stockbridge, \$1,317.76; Washington, \$4,230.57; West Stockbridge, \$286.10; Williamstown, \$14,903.85; Windsor, \$6,248.28.

**BRISTOL COUNTY.**- Acushnet, \$6,421.32; Attleboro, \$4,482.67; Berkley, \$2,089.10; Dartmouth, \$10,467.44; Dighton, \$8,396.78; Easton, \$14,653.38; Fairhaven, \$5,911.91; Fall River, \$19.56; Freetown, \$6,902.65; Mansfield, \$2,335.98; New Bedford, \$3,553.92; Norton, \$9,669.49; North Attleboro, \$4,236.23; Raynham, \$9,513.66; Rehoboth, \$6,355.14; Seekonk, \$11,351.18; Somerset, \$12,099.21; Swansea, \$19,408.55; Taunton, \$17,850.79; Westport, \$7,900.61.

**DUKES COUNTY.**- Chilmark, \$2,703.25; Edgartown, \$1,054.12; Gay Head, \$989.52; Oak Bluffs, \$1,247.77; Tisbury, \$758.15; West Tisbury, \$1,770.34.

**ESSEX COUNTY.**- Amesbury, \$6,494.19; Andover, \$19,445.28; Beverly, \$5,669.21; Danvers, \$6,913.40; Essex, \$3,441.41; Gloucester, \$8,955.42; Groveland, \$1,271.24; Hamilton, \$2,555.12; Haverhill, \$6,408.07; Ipswich, \$4,713.84; Lawrence, \$2,563.19; Lynn, \$6,339.09; Lynnfield, \$11,865.79; Manchester, \$9.40; Merrimac, \$1,161.99; Methuen, \$10,675.50; Middleton, \$6,637.58; Newbury, \$4,808.32; Newburyport, \$8,868.08; North Andover, \$18,063.92; Peabody, \$15,888.83; Rockport, \$493.27; Rowley, \$7,824.70; Salem, \$10,859.78; Salisbury, \$6,027.77; Saugus, \$39,197.58; Swampscott, \$13,154.41; Topsfield, \$3,930.96; Wenham, \$2,044.27; West Newbury, \$5,933.39.



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FRANKLIN COUNTY. - Ashfield, \$1,466.59; Bernardston, \$8,013.26; Buckland, \$1,989.10; Charlemont, \$13,123.76; Colrain, \$500.26; Conway, \$854.83; Deerfield, \$6,921.60; Erving, \$5,276.63; Gill, \$1,697.34; Greenfield, \$6,108.10; Leyden, \$648.49; Monroe, \$108.97; Montague, \$2,965.96; New Salem, \$6,161.59; Northfield, \$5,619.40; Orange, \$2,302.40; Shelburne, \$4,435.29; Shutesbury, \$1,383.44; Sunderland, \$2,695.96; Whately, \$3,017.91.

HAMPDEN COUNTY. - Agawam, \$9,994.04; Blandford, \$1,013.21; Brimfield, \$8,169.42; Chester, \$7,424.21; Chicopee, \$3,524.31; East Longmeadow, \$1,190.51; Holland, \$108.97; Holyoke, \$4,323.45; Longmeadow, \$879.08; Ludlow, \$255.51; Monson, \$6,066.57; Palmer, \$14,046.27; Russell, \$5,605.03; Southwick, \$2,382.04; Springfield, \$191.31; Tolland, \$566.08; Wales, \$1,754.93; Westfield, \$6,389.30; West Springfield, \$1,653.30; Wilbraham, \$6,027.11.

HAMPSHIRE COUNTY. - Amherst, \$4,320.34; Belchertown, \$4,269.41; Cummington, \$4,341.80; Easthampton, \$1,365.48; Enfield, \$25.05; Goshen, \$1,861.55; Granby, \$3,901.29; Hadley, \$4,837.76; Hatfield, \$3,594.60; Huntington, \$7,792.17; Northampton, \$5,676.26; Pelham, \$1,370.84; Southampton, \$3,137.73; South Hadley, \$7,586.92; Ware, \$10,261.99; Williamsburg, \$1,846.26; Worthington, \$798.30.

MIDDLESEX COUNTY. - Acton, \$13,460.81; Arlington, \$8,235.70; Ashby, \$3,253.51; Ashland, \$4,494.46; Ayer, \$6,331.87; Bedford, \$1,619.79; Belmont, \$3,127.34; Billerica, \$15,046.45; Buxboro<sup>ush</sup>, \$3,185.74; Burlington, \$9,265.38; Cambridge, \$1,439.36; Chelmsford, \$6,137.45; Concord, \$17,785.79; Dracut, \$6,177.85; Framingham, \$22,840.50; Groton, \$7,942.65; Holliston, \$7,485.30; Hudson, \$1,332.49; Lexington, \$29,048.02; Lincoln, \$10,005.03; Littleton, \$10,097.51; Lowell, \$4,617.87; Malden, \$12,020.44; Marlboro<sup>ush</sup>, \$11,933.77; Medford, \$1,883.60; Melrose, \$1,411.32; Newton, \$30,298.16; Natick, \$15,904.68; North Reading, \$3,374.01; Pepperell, \$2,732.79; Reading, \$7,624.04; Sherborn, \$26.30; Shirley, \$3,832.65; Somerville, \$2,030.37; Stoneham, \$4,129.87; Sudbury, \$9,939.97; Tewksbury, \$5,765.30; Townsend, \$4,002.43; Tyngsboro<sup>ush</sup>, \$8,012.89; Waltham, \$2,250.80; Watertown, \$4,319.81; Wayland, \$6,915.93; Westford, \$3,111.58; Weston, \$12,650.47; Wilmington, \$5,954.00; Winchester, \$8,333.93; Woburn, \$14,934.56.

NANTUCKET COUNTY. - Nantucket, \$1,116.13.

NORFOLK COUNTY. - Avon, \$3,407.38; Bellingham, \$1,304.39; Braintree, \$14,403.77; Brookline, \$15,378.15; Canton, \$26,340.30; Cohasset, \$4,480.16; Dedham, \$37,794.73; Dover, \$12,880.86; Foxboro<sup>ush</sup>, \$12,299.43; Franklin, \$863.29; Holbrook, \$27,810.25; Milton, \$30,221.09; Needham, \$13,028.64; Norfolk, \$2,095.99; Norwood, \$16,966.70; Plainville, \$3,527.99; Quincy, \$10,362.97; Randolph, \$17,768.15; Sharon, \$4,477.40; Stoughton, \$35,211.86; Walpole, \$17,675.80; Wellesley, \$27,653.58; Westwood, \$11,576.93; Weymouth, \$32,767.62; Wrentham, \$30,974.76.

PLYMOUTH COUNTY. - Abington, \$9,172.48; Bridgewater, \$3,275.17; Brockton, \$9,818.44; Carver, \$6.26; Duxbury, \$6,589.16; East Bridgewater, \$4,978.41; Hanover, \$1,940.40; Hingham, \$7,546.61; Hull, \$451.77; Kingston, \$2,100.37; Lakeville, \$5,870.49; Marion, \$3,626.18; Marshfield, \$5,985.21; Mattapoisett, \$2,240.77; Middleboro<sup>ush</sup>, \$10,439.31;



Norwell, \$1,254.47; Pembroke, \$1,446.25; Plymouth, \$4,742.53;  
Rochester, \$1,401.08; Rockland, \$3,251.73; Scituate, \$4,664.94;  
Wareham, \$16,573.87; West Bridgewater, \$1,868.52; Whitman, \$2,976.10;

SUFFOLK COUNTY.- Boston, \$23,553.11; Chelsea, \$2,838.84; Revere,  
\$70,593.60.

WORCESTER COUNTY.- Ashburnham, \$2,647.10; Athol, \$7,620.41; Auburn,  
\$8,708.80; Barre, \$5,626.91; Blackstone, \$1,985.13; Boylston, \$85.76;  
Brookfield, \$1,933.61; Charlton, \$6,617.23; Douglas, \$933.05; Dudley,  
\$4,877.39; East Brookfield, \$8,835.26; Fitchburg, \$1,715.31; Gardner,  
\$4,775.85; Grafton, \$6,364.26; Hardwick, \$270.95; Harvard, \$3,021.91;  
Holden, \$7,765.74; Hopedale, \$1,837.26; Lancaster, \$568.56; Leicester,  
\$5,127.91; Leominster, \$914.69; Lunenburg, \$6,060.79; Mendon, \$866.47;  
Milford, \$1,947.24; Millbury, \$2,821.51; Millville, \$1,039.10; New  
Braintree, \$207.35; North Brookfield, \$1,801.78; Northborough, \$8,393.52;  
Northbridge, \$4,284.66; Oakham, \$4,705.45; Oxford, \$8,186.27; Paxton,  
\$1,813.93; Petersham, \$8,340.69; Phillipston, \$867.94; Princeton,  
\$3,328.81; Royalston, \$6.26; Rutland, \$6,881.35; Shrewsbury, \$11,500.53;  
Southboro, \$8,159.51; Southbridge, \$881.06; Spencer, \$854.69; Sterling,  
\$6,315.90; Sturbridge, \$14,492.24; Sutton, \$2,941.88; Templeton,  
\$8,319.10; Upton, \$3,701.19; Uxbridge, \$7,949.74; Warren, \$9,831.63;  
Webster, \$1,214.19; Westboro, \$9,875.90; West Boylston, \$6,312.58;  
West Brookfield, \$2,653.95; Westminster, \$4,154.07; Winchendon,  
\$4,599.38; Worcester, \$10,228.70.

Curb markings

Traffic survey

Monthly salaries

Chap. 357 (Acts of 1926 - Advice to  
Cities & Towns)

Traffic census

Art project

#### Machinery and Motor Vehicles

##### Machinery and Apparatus

Salaries and labor

Expenses of employees

New machinery

Contract work-- Labor and  
repairs

Materials and repairs

Supplies, parts and fittings

Freight and express

Rent, light, heat & fuel

Inspection of boilers

Telephone

Miscellaneous

##### Motor Vehicles

How cars

32 snow-removal units

(includes truck & 100000 lbs. weight)

4 Passenger cars

72

Miscellaneous expenditures for maintenance of highways were as follows:-

Snow Removal →

Truck repairs-- labor and parts	105,138.75	
Truck operation	30,099.21	
Truck plow repairs	58,487.89	
Sandspreaders-- repairs, labor and parts	7,885.47	
Tractors-- repairs, labor and parts	1,604.53	
Snow fence-- erection and maintenance	16,878.98	
Snow removal work in municipalities	<u>1,031,895.18</u>	\$1,251,990.01

Traffic →

Route markers	22,892.09	
Direction signs	15,070.92	
Warning signs	41,143.67	
Regulatory signs	9,160.73	
Tercentenary signs	127.86	
Control signals	46,020.64	
Surface markings	25,160.31	
Curb markings	126.47	
Traffic survey	18,285.44	
Monthly salaries	54,212.08	
Chap. 357 (Acts of 1928-Advice to Cities & Towns)	1,230.52	
Traffic census	1,414.36	
Art project	<u>1,442.06</u>	\$ 236,287.15

Machinery and Motor Vehicles →

Machinery and Apparatus

Salaries and labor	238,610.96	
Expenses of employees	768.23	
New machinery	11,618.02	
Contract work-- Labor and repairs	11,189.18	
Materials and repairs	3,035.02	
Supplies, parts and fittings	5,598.65	
Freight and express	60.25	
Rent, light, heat & fuel	2,348.78	
Inspection of boilers	56.19	
Telephone	958.42	
Miscellaneous	<u>747.71</u>	\$ 274,991.41

Motor Vehicles →

New cars		
32 Snow removal units (includes truck & plow)	504,327.58	
4 Passenger cars	<u>5,179.00</u>	509,506.58



Motor Vehicles (Cont.) →

Garage rent	\$ 627.99	
Gas and lubricants	3,785.11	
Tubes and tires	1,916.47	
Repairs and parts	5,212.87	
Miscellaneous	<u>725.00</u>	\$ 521,774.02

Bridges →

Somerset Bridge	15,104.14	
Newburyport Bridge	7,554.19	
New Bedford-Fairhaven Bridge	16,451.70	
Quincy-Weymouth Bridge	20,441.95	
Slade's Ferry Bridge	<u>2,494.81</u>	62,046.79
Detour and route maps		580.22
Geodetic survey		3,697.48
Tractor repairs		14,241.76
Technical services		<u>361.25</u>

Total miscellaneous expenditures \$ 2,365,970.09

Summary of Maintenance Expenditures

Maintenance and repair of State Highways	2,065,928.86
Miscellaneous expenditures	<u>2,365,970.09</u>
Total	\$ 4,431,898.95

## ORDINARY AND SPECIAL MAINTENANCE

The usual work of repairing road surfaces, maintaining shoulders and slopes, cleaning of drainage ditches and conduits, and miscellaneous work on the right of way, which includes repairing fences, trimming trees, clearing roadsides, and general improvement of the appearance of State highways, was performed under the ordinary maintenance allotment. The amount of work necessary was increased this year; first, by a series of severe storms in July; and later, by the September hurricane and flood. Separate reports have been prepared for work under these items which was done under special allotments.

Special maintenance and betterment work performed by maintenance forces this year was restricted at first by the limited funds available, and later by the necessity of spending all available funds to correct flood and hurricane damage.

The greater part of the work done was on surface treatments, for the improvement of about eighty-six miles of State highway surface.

Some betterment projects were undertaken during the year. However, the principal work done is summarized as follows: 1.2 miles\* of pipe culverts with incidental manholes, catchbasins and ditches were laid; 3.3 miles of highway were widened from the edge of existing surface to the sidewalk curb. Several intersections were improved by the addition of curbstone and by widening and resurfacing.



# REMOVAL OF SNOW AND ICE FROM STATE HIGHWAYS AND CERTAIN TOWN ROADS

During the year snow removal was carried on under Chapter 273 of the Acts of 1927, and Section 11, Chapter 84, General Laws.

The snow removal program for this year included a total of 1982.5 miles of road, of which 1771.5 miles were State highway and 211.0 miles were town roads.

Snow removal involves an extensive program with summer repairs to equipment, fall erection of snow fence, piling of sand, and continuing through the winter with actual operations.

During the past year 60 miles of snow fence were erected in the fall, and 9 miles of new fence were purchased.

Plowing was carried out with satisfactory results, particularly with the use of the newer heavy-duty type units.

Ice treatment and prevention which were the major part of the work were carried out in much the same manner as in the past few years with increase in extent.

During the year the Department secured thirty-two new snow removal units.

During the September flood and hurricane snow removal trucks and Autocars equipped with wrecking cranes were used for clearing the highways and making necessary repairs.

The amount of \$1,266,066.16 was expended by the Department during the year for plowing, sanding, snow fence, clearing waterways, equipment maintenance, calcium and sodium chloride.

BRIDGE MAINTENANCE AND OPERATION

DRAW BRIDGE OVER THE MERRIMAC RIVER BETWEEN NEWBURYPORT AND SALISBURY

This bridge was placed in charge of the Massachusetts Highway Commission and made a State highway by the provisions of Chapter 716, Acts of 1912, which also provided that the expense of keeping the bridge in good repair for travel, of operating the draw and of maintaining the structure shall be paid by the Commonwealth.

The number of draw openings during the year ending November 30, 1938, was 117. In 1937 the number of such openings was 201; in 1936 the number was 168; in 1935 the number was 178; in 1934 the number was 110; and in 1933 the number was 153.

The total expenditure during the year was \$7,554.19.

The total expenditure from 1912 to November 30, 1938, inclusive, was \$219,175.63.

DRAW BRIDGE OVER TAUNTON RIVER BETWEEN FALL RIVER AND SOMERSET

This bridge was placed in charge of the Massachusetts Highway Commission and made a State highway by the provisions of Chapter 717, Acts of 1912, which also provided that the expense of keeping the bridge in good repair for travel, and for operating the draw and maintaining the structure, shall be paid by the Commonwealth.

The number of draw openings during the year ending November 30, 1938, was 1,147. In 1937 the number of such openings was 1,385; in 1936 the number was 1,591; in 1935 the number was 1,492; in 1934 the number was 2,118; and in 1933 the number was 1,602.

The total expenditure during the year was \$15,104.14.

The total expenditure from 1912 to November 30, 1937, inclusive, was \$451,306.63.

DRAW BRIDGE OVER ACUSHNET RIVER BETWEEN CITY OF NEW BEDFORD  
AND THE TOWN OF FAIRHAVEN

This bridge, which was placed in charge of the Department of Public Works and made a State highway by the provisions of Chapter 406, Acts of 1930, which also provided that the expense of keeping the bridge in good repair for travel, operating the draw and of maintaining the structure, shall be paid by the Commonwealth, was taken over by the Department on June 27, 1930.

The number of draw openings while in charge of the Department beginning June 27, 1930, and ending November 30, 1932, was 1,069. In 1933, the number of such openings was 1,867; in 1934 the number was 1,434; in 1935 the number was 1,318; in 1936 the number was 1,381; in 1937 the number was 1,064; and in 1938 the number was 997.

The total expenditure during the year was \$16,451.70.

The total expenditure while in charge of the Department has been \$176,064.00.



DRAW BRIDGE OVER WEYMOUTH FORE RIVER BETWEEN THE CITY  
OF QUINCY AND THE TOWN OF WEYMOUTH

The jurisdiction of the Department of Public Works over this bridge is provided for by Chapter 348, Acts of 1933. The construction of the new bridge at this location required the construction of a temporary bridge to accommodate the vehicular traffic which normally passed over the old bridge.

The number of draw openings at this temporary bridge from December 1, 1935, to May 23, 1936, was 1,467.

The new drawbridge was put in service May 23, 1936. From May 23, 1936, to November 30, 1936, the number of openings of the new drawbridge was 302. In 1937 the number of openings was 479 and in 1938 the number was 366.

The total expenditure during the year was \$20,441.95.

The total expenditure since construction for the maintenance and operation of both the temporary and new bridges was \$52,221.21.

## ROADSIDE MAINTENANCE AND DEVELOPMENT

Roadside maintenance and development included the following; maintaining existing natural growth, landscaping existing highways, supervising landscaping on new construction, supervising tree-trimming for wire clearance by public utility companies, operating State Nursery and supervising repair of hurricane damage.

Three major projects were done under contract in which the Federal Government participated. These contracts were on the "Tunnel Road" in Revere, Malden and Saugus, the Newburyport Turnpike in Saugus and the Northern Circumferential Highway in Lynnfield and Peabody. Landscaping included five grade separations and two traffic circles, and required a total of 53,932 shrubs, 12,600 vines and 2,567 trees.

Seventeen W.P.A. Projects were sponsored for grading, sodding and seeding; also for retaining wall and curbing placements.

Part of the W.P.A. work was in Oxford on Route 20, a curve being widened, a wall constructed, a drainage system installed and surface of slope landscaped, using natural growth. A considerable sum had been spent here annually to clear away material washed on to the roadway. This condition has been corrected and the appearance improved.

A considerable amount was spent in Westport on Route 6 where the center strip between the eastbound and westbound roadways was renovated. This strip was formerly the location of car tracks and it was necessary to raise the grade more than a foot and place curbing throughout the entire length on both sides. Many accidents had occurred on this section of this route but it is believed that these improvements have eliminated the hazards as well as improved the appearance of the roads.

Work has been done in Middlesex and Norfolk Counties, also. This, when completed, will reduce maintenance and improve appearance of the highways.

A summary of the major items contained in W.P.A. projects shows:- sodding 49,678 square yards; seeding 6,598 square yards and fine grading 64,176 square yards; trees removed, reset and trimmed 1,711; trees and shrubs planted 260; pipe laid 2,418 linear feet; stone walls 2,104 linear feet; curbing 33,527 linear feet; paved gutter 641 square yards.

In order to make replacements in plantings economically, there is maintained sufficient stock for this purpose at the State Nursery, Sudbury. The past year 936 shrubs, 4,588 trees and 20 vines from the Nursery were planted throughout the Commonwealth.

The largest part of the roadside maintenance work for 1938 was the repair of trees and correction of conditions caused by the September hurricane. Over 26,000 trees were blown down and 100,000 damaged. To clear the roads immediately, about 9,000 trees were removed by Department employees and removal of the balance was awarded to contractors. Contracts were awarded for repairing damaged trees. Nearly 83,000 trees were trimmed or treated and 15,200 removed in addition to the original 9,000. The expenditures for hurricane repairs thus carried out amounted to over \$800,000.



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STORM AND FLOOD RELIEF

Severe storms during July caused considerable damage to State highways. The extent of this damage was so great that special Legislation was enacted, which permitted the sum of \$200,000 to be allotted to the Department under Chapter 498 of the Acts of 1938. Heavy fall rains caused flood conditions from September 20, 1938 to September 25, 1938. The seriousness of the situation had approached the proportions of a major disaster when the hurricane struck the State during the afternoon and evening of September 21.

Maintenance forces were kept on duty nearly twenty-four hours a day patrolling the roads and clearing away the debris. The Legislature at a special session appropriated funds under Chapter 505, Acts of 1938, -- \$8,750,000 for town and county ways and \$5,500,000 for State highways.

Major reconstruction flood projects were done under contract. \$545,000 was spent on this work, \$100,000 of which was charged to Chapter 505, Acts of 1938, the balance being charged to Ordinary Maintenance.

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SIDEWALKS ALONG STATE HIGHWAYS

Bond Issue

Six sidewalk construction projects were operated during the fiscal year 1938 with State funds derived from the Bond Issue (Chapter 464, Class 2, Acts of 1935).

The work consisted mostly of cleaning up small sections of walk on projects operating the previous year.

At the end of the fiscal year, a balance of \$7,000 remained.



STATE AND W.P.A. MAINTENANCE BETTERMENT PROJECTS ALONG STATE HIGHWAYS

Widening and Resurfacing

Projects were carried out under the provisions of Chapter 494, Item C, Acts of 1938, appropriating \$500,000 for reconstruction and repair of State highways in conjunction with Works Progress Administration.

Specific maintenance betterment allotments made by the State on projects approved by the Works Progress Administration amounted to \$305,385.89 at the end of the fiscal year, the Federal contribution being \$715,816.09.

Many projects were just starting at the time of the hurricane and flood and the Works Progress Administration labor was reassigned to emergency hurricane and flood work.

Most of the projects undertaken consisted of hardening the area between the edge of existing surface and the sidewalk curb.

A few necessary drainage projects were also undertaken and about 1.9 miles of pipe culverts were laid with incidental manholes, catchbasins, curb inlets and drainage ditches.

The Department maintains in the Public Works Building in Boston, a materials testing laboratory equipped with personnel and modern apparatus for measuring chemical and structural properties of materials proposed for use in construction and maintenance of highways and bridges.

Seventy-one hundred samples of more than one hundred different types of materials were submitted the past year. These samples were tested and the results used as a basis of acceptance or rejection of materials represented. Results of many additional analyses were incorporated in reports on investigational and research work.

Among several advances made by the Department in keeping methods of testing up to date were installation and use of a Los Angeles abrasion machine for measuring structural properties of crushed stone and gravel, and organization of a soils testing division in the Laboratory where tests are made on foundation materials.

The scope of work performed in field laboratories under direction of the several District Highway Engineers was expanded. Some three thousand check tests were made on gradation, moisture content and cleanliness of aggregates used in cement concrete. A one-hundred-thousand-pound capacity compression machine was installed in the Greenfield field laboratory for testing strength of cement concrete being placed in the large number of bridges constructed in the western part of the State after the September Flood.

The Laboratory continued its participation in cooperative research performed by many leading materials testing laboratories of the country, thus making available results of the work of all laboratories for use in work of the Department.



# TRAFFIC

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## TRAFFIC SIGNS, LIGHTS, MARKINGS, SIGNAL SYSTEMS AND REGULATIONS

Under the provisions of chapters 85 and 89, General Laws, as amended, certain duties are placed upon the Department in order to secure uniformity in highway traffic signs, signals, markings, devices and regulations.

The Department is required to erect on all numbered routes such signs, etc., as it may deem necessary for promoting the public safety and convenience.

### TRAFFIC SIGNS, SIGNALS, ETC., ERECTED BY DEPARTMENT

Accordingly, the Department has, during the past year, erected those signs, etc.

	1938
Traffic signals . . . . .	7
Traffic beacons . . . . .	17
Traffic signs . . . . .	7955
Traffic markings (in miles) . . . .	872

The erection or designation of the foregoing was based upon accident analyses, traffic counts and speed checks. It is only through a close study of these that the need for warning or control can be accurately gauged.

### DIRECTIONAL SIGNS AND ROUTE MARKERS ERECTED BY DEPARTMENT

Still other signs have been erected under the provisions of the first-named chapter. These are known as directional signs. Posted at or within intersections, these serve to direct the motorist to adjacent, contiguous and even remote towns.

Travel has been further facilitated by the opening of new routes and the marking of these with button signs which notify the motorist upon which route he is traveling.

The fabricating and painting of these signs are done at the Department's traffic shop.

### TRAFFIC CONTROL SIGNALS, SIGNS AND REGULATIONS APPROVED BY DEPARTMENT

The provisions of the several chapters already referred to also make the validity of regulations made, or signs, etc., erected by cities and towns upon ways within their control, dependent upon the written approval of the Department of Public Works.

As a means of aiding the municipalities in this respect, the Department assigns its engineers to make studies, and to give advice to those cities and towns which desire to control vehicular traffic through the medium of regulations and signs.

This resulted during the past year in the Department's approving the following traffic control features:

	1938
Traffic signals . . . . .	17
Traffic beacons . . . . .	6
Traffic Sign, Marking & Island Permits . . . . .	195
Traffic rules and regulations . . .	232
Isolated stop signs . . . . .	342
Safety zones . . . . .	4

## FEDERAL AID IN CONSTRUCTING HIGHWAYS

Statements as to the Acts of Congress and of the Massachusetts Legislature in respect to cooperation between the United States and the Commonwealth of Massachusetts in the construction of highways under the Federal Highway Act approved November 9, 1921, may be found in the annual reports of the Massachusetts Department of Public Works for the years 1920 to 1927 inclusive.

A detailed statement of the Federal Aid Allotments and Projects appears in the Department Report for the fiscal year 1933. Additions and alterations for the fiscal years 1934, 1935, 1936, 1937 and 1938 and a summary of the allotments appear as follows:

Regular Federal Aid Funds from June 30, 1926 to June 30, 1933		\$18,523,440.00
1931 Federal Emergency Advance Funds		1,141,460.00
Federal Emergency Relief and Construction Act of 1932		1,716,612.00
1934 National Recovery Funds		
(Appropriated under the National Industrial Recovery Act, approved June 16, 1933)		6,597,100.00
1935 National Recovery Funds		
(Appropriated under the Hayden-Cartwright Act approved June 18, 1934)		3,350,474.00
1936 Regular Federal Aid Funds		
(Authorized under the Hayden-Cartwright Act approved June 18, 1934)		1,741,877.00
1937 Regular Federal Aid Funds		
(Authorized under the Hayden-Cartwright Act approved June 18, 1934)		<u>1,743,487.00</u>
		\$34,814,450.00
Works Program Funds - Highways	\$3,262,885.00	
Works Program Funds - Grade Crossings	<u>4,210,833.00</u>	
Total Works Program Funds	\$7,473,718.00	
(Appropriated under the Emergency Relief Appropriation Act of 1935)		7,473,718.00
WPA Funds used in connection with Works Program Funds		
(Appropriated under the Emergency Relief Appropriation Act of 1935- Transferred to the Bureau of Public Roads for Federal Aid purposes)		958,133.00
Funds for Flood Replacement Projects		
(Authorized under the Emergency Relief Appropriation Act of 1936, approved June 22, 1936)		<u>1,533,850.00</u>
Sub-total		\$44,780,151.00



Sub-total brought forward

1,769,936.00

1938 Federal Aid Funds

(Authorized under the Hayden-Cartwright Act approved June 16, 1936)

Regular Federal Aid Funds	\$1,769,936.00	
Penalty Assessed in 1938 for Diversion of Highway Funds	<u>265,899.00</u>	
Net Amount		\$1,506,037.00
Funds for Secondary or Feeder Roads	353,937.00	
Penalty Assessed in 1938 for Diversion of Highway Funds	<u>52,780.00</u>	
Net Amount		301,207.00
Grade Crossing Elimination Funds	1,047,500.00	
Penalty Assessed in 1938 for Diversion of Highway Funds	<u>156,183.00</u>	
Net Amount		891,317.00

Grade Crossing Funds Apportioned as follows:

On F.A. System outside municipalities	\$423,200.00
Within municipalities whether or not on F.A. System	431,407.00
Outside municipalities and not on F.A. System	<u>56,710.00</u>
Total	\$891,317.00

Total 1938 Funds

\$2,698,561.00      2,698,561.00

1939 Federal Aid Funds

(Authorized under the Hayden-Cartwright Act approved June 16, 1936)

Regular Federal Aid Funds (Authorized under Section 1)		1,725,964.00
Funds for Secondary or Feeder Roads		
(Authorized under Section 6)		
Projects not on State Highways	320,193.00	
Projects on State Highways	<u>25,000.00</u>	
Total Secondary Funds	\$345,193.00	345,193.00
Grade Crossing Elimination Funds		
(Authorized under Section 8)		
On F.A. System outside municipalities	140,000.00	
Within municipalities whether or not on extension of F.A. System	<u>710,000.00</u>	
Outside municipalities and not on F.A. System	171,971.00	
Total Grade Crossing Funds	\$1,021,971.00	<u>1,021,971.00</u>
Total 1939 Funds		<u>\$3,093,128.00</u>

3,093,128.00

~~Total Funds Authorized to November 30, 1938~~

Total Funds Authorized to November 30, 1938

\$50,571,840.00

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~~There were~~ Thirty (30) projects <sup>were</sup> prepared in addition to those shown on the Annual Report of the Department of Public Works for 1937. The length of Federal Aid highway and bridge projects in this state from the commencement of work of this type to November 30, 1938 inclusive is 1165.405 miles, and increase of 28.016 miles over 1937.

In addition to these highway and bridge projects there were seven (7) Roadside Development Projects done under four (4) contracts totaling about 11.010 miles. These were all on old Federal Aid Projects.

The total length of Federal Aid projects (1165.405 miles) divided according to the various counties of the State is as follows:

<u>County</u>	<u>Mileage as of</u> <u>Nov. 30 '37</u>	<u>Increase in</u> <u>1938</u>	<u>Mileage as</u> <u>of Nov. 30 '38</u>
Barnstable	108.387	1.358	109.745
Berkshire	136.036	5.934	141.970
Bristol	92.254	0.000	92.254
Dukes	3.117	0.000	3.117
Essex	97.736	4.062	101.848
Franklin	57.596	1.840	59.436
Hampden	71.968	0.603	72.571
Hampshire	56.143	1.299	57.447
Middlesex	109.442	8.073	117.515
Norfolk	92.997	2.084	95.081
Plymouth	114.464	0.000	114.464
Suffolk	5.839	1.202	7.041
Worcester	191.355	1.561	192.916
Total	1137.382	28.016	1165.405 Miles



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STATEMENT OF FEDERAL AID FUNDS

1931 Federal Emergency Advance Funds		\$1,141,460.00
See Department Report for 1933		
1932 Federal Emergency Relief Funds		1,716,612.00
See Department Report for 1935		
1934 National Recovery Funds		
Total Amount Under Agreement	\$6,550,777.64	
Agreement Pending	<u>46,322.36</u>	6,597,100.00

For Details of 1934 National Recovery Projects See Department Report for 1937- All projects of this classification have been completed and final payment has been received except Quincy-Weymouth NRI 170-C, which will probably take up the balance.

# 1935 National Recovery Funds

## Allotted as follows:

Andover (b)	NRS 255	\$189,449.00
Athol-Orange	NRS 254	156,859.56
Billerica-Chelmsford (b)	NRS 253	107,146.04
Blandford (b)	NRS 252	53,368.79
Boston-Brookline	NRM 235-E (1)	492,880.00
Boston (b)	NRM 251-B	128,471.56
Bourne (b)	NRH 176-B	77,811.54
Bourne-Wareham	NRH 125-C	146,040.32
Cheshire (b)	NRH 173-E	149,590.82
Dracut-Methuen (b)	NRH 250	285,253.51
Dedham (b)	NRH 251-A	229,244.00
Framingham (a) (b)	NRH 211-B	1,741.00
Framingham (a) (b)	NRH 211-F	2,678.64
Haverhill (b)	NRM 39-B	42,203.56
Lenox (a) (b)	NRH 114	7,056.32
Lenox (a) (b)	NRH 147-A	673.44
Lowell (b)	NRM 91	59,022.86
Millbury	NRH 256-A	403,122.92
Montague	NRS 257	313,669.92
Natick (a) (b)	NRH 211-C	5,483.00
Northborough (a) (b)	NRH 211-A	11,317.53
Otis-Blandford (b)	NRS 247-B	67,036.95
Pittsfield (b)	NRM 21-C	27,604.00
Rutland (b)	NRH 134-E	19,155.95
Sheffield (a) (b)	NRH 98	330.72
Sheffield (a) (b)	NRH 137-C	2,110.40
Southwick (b)	NRH 73	133,561.79
Wayland (b)	NRH 124-D	12,400.00
Westfield (b)	NRM 153-C	54,312.55

Total Under Agreement	\$3,179,596.69
Amount Available	3,350,474.00
Agreement Pending	170,877.31

(a) Roadside Development Project

(b) Amount shown is actual final payment received.

~~The difference between this amount and the agreement amount is reverted and becomes available for other uses under "Agreement Pending".~~

All other projects have balances still due which will become payable when the final vouchers are submitted and approved.



# Emergency Relief Appropriation Act of 1935

## Works Program - Highways

### Allotted as follows:

Attleboro-North Attleborough	WPSO 290	\$252,640.00
Plainville	WPH 173-A	7,300.00
Cheshire (a)	WPH 173-E	9,780.00
Clinton	WPSO 291	86,170.00
Dartmouth-Westport	WPH 152-D	130,110.00
Deerfield-Sunderland (c)	WPH R 308-A	389,770.00
Deerfield-Sunderland (c)	WPH R 308-B	47,070.00
Gill-Montague (c)	WPSO R 307	521,293.00
Crafton-Shrewsbury	WPSO 288-A	11,650.00
Greenfield	WPH 222-B	74,980.00
Holyoke	WPMH 284-A	163,530.00
Lanesborough (a)	WPH 173-C	920.00
Lanesborough (a)	WPH 173-B	3,870.00
Lynn (b)	WPLS 267	63,350.00
Lynnfield	WPH 272-A	271,940.00
Mansfield	WPSO 285-R	3,710.00
Mansfield	WPSO 278-A	4,710.00
Marshfield-Pembroke	WPSO 292	312,580.00
Middleborough (a) (b)	WPH 149-A	665.00
Middleborough (a) (b)	WPH 207-A	200.00
Peabody	WPH 272-B	717,080.00
Sterling (a) (b)	WPH 172-C	6,230.00
West Boylston (a) (b)	WPH 240-A	834.00
West Boylston (a) (b)	WPH 240-B	539.00
West Boylston (a) (b)	WPH 240-C	460.00
West Bridgewater	WPSO 304	87,069.00
Worcester	WPMH 293-A	27,520.00
Worcester (a) (b)	WPMH 240-A	639.00
Worcester (a) (b)	WPMH 240-D	900.00

Total Amount of Funds Under Agreement	\$ 3,197,597.00
Amount Available	<u>3,262,385.00</u>

Agreement Pending	\$65,288.00
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(a) Roadside Development Projects

(c) Amount shown represents 50% of cost.  
Remaining 50% from WPA funds transferred  
to Bureau of Public Roads ~~Worcester~~

(b) Amount shown is actual final payment received.

~~The difference between this amount and the agree-~~  
~~ment amount is reverted and becomes available for~~  
~~other uses under "Agreement Pending".~~

All other projects have balances still due which  
will become payable when the final vouchers are  
submitted and approved.

Emergency Relief Appropriation Act of 1935

Works Program - Grade Crossings

Allotted as follows:

Amherst	WPGM 280-A	\$73,600.00
Ashburnham	WPGH 164-C	116,380.00
Attleboro	WPGM 274-A	92,560.00
Ayer	WPGS 263	122,468.00
Braintree (b)	WPGS 287	9,541.00
Braintree	WPGS 265	197,690.00
Canton-Norwood-Westwood	WPGS 269	106,800.00
Foxborough	WPGS 270	156,040.00
Foxborough-Mansfield (b)	WPGS 271	20,324.00
Grafton-Shrewsbury	WPGS 288-B	124,893.00
Hopkinton-Westborough	WPGS 289	94,320.00
Huntington	WPGS 283	323,690.00
Lawrence	WPGM 275	84,977.00
Lunenburg	WPGS 276	78,851.19
Mansfield	WPGS 278-B	91,930.00
Mansfield	WPGS 285-A	90,050.00
Milford	WPGS 305	117,850.00
Monson	WPGS 279	119,230.00
Newbury	WPGM 75-A	14,814.89
Newbury-Newburyport	WPGH 75-B	297,156.46
Quincy	WPGH 260	383,727.00
Sharon	WPGS 262	151,133.23
Sharon	WPGS 277	65,060.00
Sheffield	WPGH 137-D	115,802.00
Sheffield-(Canaan Comm.)	WPGH 310	7,250.00
Waltham	WPGM 208-C	207,519.98
Weymouth	WPGH 121-C	107,379.69
Worcester	WPGM 293-B	348,260.00
Planning Survey (b)		63,160.00
Total Under Agreement		\$3,782,457.24
Amount Available		4,210,833.00
Agreement Pending		428,375.76

(b) Amount shown is actual final payment received. ~~The difference between this amount and the agreement amount is reverted and becomes available for other uses under "Agreement Pending".~~

All other projects have balances still due which will become payable when the final vouchers are submitted and approved.



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WPA Funds Used for Federal Aid Purposes

The following amount (\$958,133.00) was appropriated under the Emergency Relief Appropriation Act of 1935 and was transferred from the WPA to the Bureau of Public Roads for highway purposes.

This amount was apportioned to the following projects, each amount representing 50% of the estimated cost of the work. The remaining 50% of the cost was financed by Works Program Highway Funds ~~None of this report~~.

Deerfield-Sunderland	WPH R 303-A	\$389,770.00
Deerfield-Sunderland	WPH R 303-B	47,070.00
Gill-Montague	WPSO R 307	521,293.00
Total		<u>\$958,133.00</u>

# 1936 Regular Federal Aid

Apportioned as follows:

Arlington-Belmont-Cambridge (a) (b)	242-A	\$1,075.50
Arlington-Belmont (a) (b)	242-B	916.50
Bourne (b)	258	161,091.50
Cohasset-Hingham (a)	170-A	3,235.00
Cohasset-Scituate (a)	170-B	6,649.00
Dedham-Norwood-Westwood (a) (b)	231-B	325.00
Foxborough-Plainville-		
Wrentham (a) (b)	220	643.50
Foxborough-Sharon-Walpole (a) (b)	227	493.50
Gloucester (a) (b)	99	584.00
Gloucester (a) (b)	119-B	628.50
Hingham (a) (b)	15	3,685.50
Holyoke	127-A	269,500.00
Lynnfield (d)	17	146,720.00
Millbury-Sutton	256-B	268,900.00
Norwood-Sharon-Walpole (a) (b)	231-A	523.00
Pittsfield (d)	259-A	136,485.00
Saugus (d)	3	128,375.45
Saugus (d)	9	579,675.00
Planning Survey		26,125.00

Total Under Agreement

\$1,735,630.95

Amount Available

1,741,877.00

Agreement Pending (e)

\$6,246.05

(a) Roadside Development Project

(b) Amount shown is the actual final payment received. The difference between this amount and the agreement amount is reverted and becomes available for other uses under "Agreement Pending". All other projects have balances still due which will become payable when the final vouchers are submitted and approved.

(d) Additional funds for these projects to come from the 1937 Regular Federal Aid Funds.

(e) This amount is the total of small balances released from various projects when final payment was made and will be transferred and used in the 1937 and 1938 programs.



# 1937 Regular Federal Aid

Apportioned as follows:

Bourne	106-A	\$48,475.00
Eastham	36-A	103,155.00
Fitchburg-Leominster	273-A	194,283.00
Lynnfield (f)	17	5,285.00
Malden-Revere-Saugus	261	457,420.00
Orleans	175-B	25,395.00
Pittsfield (f)	259-A	2,825.00
Saugus (f)	3	7,434.55
Saugus (f)	9	8,500.00
Saugus (a)	2 (2)	4,609.00
Saugus (a)	9 (2)	7,903.00
Lynnfield (a)	17 (2)	1,576.00
Methuen	35-A (2)	88,680.00
Methuen	35-B (1)	81,492.00
Eastham (a) (b)	36-A (2)	20,375.50
Hadley-Northampton	193-B	657,260.00
Malden-Revere-Saugus (a)	261 (2)	3,135.00
Lynnfield (a)	272-A (2)	880.00
Peabody (a)	272-B (2)	4,182.00
Planning Survey		26,150.00

Total Under Agreement	\$1,749,515.05
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Amount Available	1,743,487.00
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Amount Overdrawn	\$6,028.05
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(This amount will be covered by balances released from 1936 Regular Federal Aid Funds)

(a) Roadside Development Projects

(b) Amount shown is the actual final payment received. All other projects have balances due which will become payable when the final vouchers are submitted and approved.

(f) Remainder of Project from 1936 Regular Federal Aid Funds (~~See Entry 3 of this report~~)

# 1938 Regular Federal Aid

Apportioned as follows:

Becket	190-C	\$97,365.00
Boston-Milton	244-B(1)	135,754.00
Concord	11	30,630.00
Concord	242-C(1)	1,390.00
Eastham (d)	36-A(2)	8,581.50
Holbrook-Braintree	313-A(1)	33,735.00
Lawrence	311-A	15,279.00
Lenox	147-A(3)	3,235.00
Montague-Sunderland	314-B(1)	25,180.00
Peabody	272-C(1)	41,120.00
Shrewsbury	226-D(1)	1,510.00
West Springfield	286 -A(1)	39,290.00
Wrentham	220(2)	1,380.00
Planning Survey		26,545.00

Total Under Agreement	\$460,994.50
Amount Available	1,506,037.00
Agreement Pending	\$1,045,042.50

Balances due on all of the above projects.  
They will become due when the final vouchers  
are submitted and approved.

- (d) Balance of this project to come from 1937  
regular Federal Aid Funds. ~~Keep P. 10 of~~  
~~this report.~~



1938 Federal Aid Crossing Funds

Montague	FAGH 314-A (1)	\$42,100.00
Swampscott	FAGM 303-A	54,710.00
Planning Survey		<u>15,710.00</u>
Total Under Agreement		\$112,520.00
Amount Available		<u>891,317.00</u>
Agreement Pending		\$778,797.00

Balances due on above projects to become due when final vouchers are submitted and approved.

1938 Secondary Projects

Falmouth	FAS 10-A (1)	\$ 34,565.00
Planning Survey		<u>2,650.00</u>
Total Under Agreement		\$ 37,215.00
Amount Available		<u>301,207.00</u>
Agreement Pending		\$263,992.00

Balance due on above projects to become due when final vouchers are submitted and approved.

1939 Federal Aid Funds

There were no projects to be financed from any of the 1939 funds (Regular, Secondary or Grade Crossing) under agreement as of November 30, 1938.

Adams - Bowens Bridge over Tophet Brook, one 40-foot span, steel  
A-4-35 stringers with concrete deck.

Adams - Dean Street over Hoosic River, one 51-foot span, steel  
A-4-13 stringers with open grid deck.

Adams - River Street over Hoosic River, one 64-foot span, steel  
A-4-6 stringers with open grid deck.

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7-  
~~Bridge Engineer~~

~~Chief Engineer~~

~~May 18, 1939~~

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~~Adams - Hatch Road over~~ BRIDGES

During the year the Department has built or contracted for 347 new structures, of which 322 were structures to replace those destroyed by the flood in September 1938; has built or contracted for alterations and repairs to 86 structures, of which 80 were damaged in the flood; has examined and reported on 10 structures at the request of local public authorities; has examined and reported on 8 structures at the request of Department authorities; has examined plans for 5 structures under the provisions of Section 35, Chapter 85, General Laws (Tercentenary Edition); and has made preliminary studies, estimates or plans for 298 structures or alterations to structures contemplated in the near future, and of these structures 178 are for those destroyed or damaged in the flood.

The various cities and towns, the localities therein, and the character of work is given in detail as follows:

BRIDGES BUILT OR CONTRACTED FOR, TO REPLACE  
BRIDGES DESTROYED BY FLOOD.

Adams - East Hoosac Street over Miller Brook, one 25-foot span,  
A-4-33 steel stringers with concrete deck.

Adams - East Hoosac Street over Miller Brook, one 21-foot span,  
A-4-26 steel stringers with concrete deck.

Adams - East Hoosac Street at Walling Road over Miller Brook,  
A-4-27 one 23-foot span, steel stringers with concrete deck.

Adams - Walling Road over Tophet Brook, one 30-foot span, steel  
A-4-34 stringers with open grid deck.

Adams - Bowens Bridge over Tophet Brook, one 40-foot span, steel  
A-4-35 stringers with concrete deck.

Adams - Dean Street over Hoosic River, one 51-foot span, steel  
A-4-13 stringers with open grid deck.

Adams - River Street over Hoosic River, one 64-foot span, steel  
A-4-6 stringers with open grid deck.



~~Windsor, Vermont, U.S.~~

~~1921/22~~

- Adams - Leonard Street over Dry Brook, one 48-foot span, steel  
A-4-2 stringers with open grid deck.
- Adams - East Road over Miller Brook, one 18-foot span, steel  
A-4-32 stringers with concrete deck.
- Adams - Notch Road over Notch Brook, one 8-foot multiplate cir-  
A-4-28 cular culvert.
- Adams - Pleasant Street over Hoosic River, one 51-foot span,  
A-4-10 steel stringers with open grid deck.
- Alford - Smith Bridge over Seekonk Brook, one 34-foot span, steel  
A-6-2 stringers with concrete deck.
- Ashfield - Graves Bridge over branch of Clesson's River, one 22-  
A-13-1 foot span, steel stringers with concrete deck.
- Ashfield - Willis Bridge over branch of Clesson's River, one 42-  
A-13-14 foot span, steel stringers with concrete deck.
- Ashfield - Field Bridge over South River, one 50-foot span, steel  
A-13-23 stringers with concrete deck.
- Ashfield - Hale Bridge over Creamery Brook, one 43-foot span, steel  
A-13-24 stringers with concrete deck.
- Ashfield - Burton Bridge over branch of South River, one 20-foot  
A-13-25 span, steel stringers with concrete deck.
- Ashfield - South Ashfield Road over branch of South River, one 17-  
A-13-26 foot span, steel stringers with concrete deck.
- Athol - New Sherborne Road over Oliver Brook, one 15-foot span  
A-15-23 concrete box culvert.
- Barre - School Street over Prince River, one 22-foot span concrete  
B-2-1 slab
- Barre - Mechanic Street over Prince River, one 44-foot span, steel  
B-2-2 stringers with concrete deck.
- Barre - Valley Road over Prince River, one 44-foot span, steel  
B-2-3 stringers with concrete deck.
- Barre - Fairgrounds Bridge over Prince River, one 32-foot span,  
B-2-4 steel stringers with concrete deck.
- Brimfield - Hanson Road over Foshett Mill Street, one 25-foot span,  
B-24-2 steel stringers with concrete deck.

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- Barre - Loring Bridge over Prince River, two 20-foot spans and  
B-2-6 one 25-foot span, steel stringers with concrete deck.
- Barre - Rich Bridge, one 22-foot span, steel stringers with con-  
B-2-9 crete deck.
- Barre - Hubbardston Road over Burnshirt River, one 58-foot span,  
B-2-18 steel stringers with open grid deck.
- Barre - Hennick Bridge over Ware River, two 43-foot spans, steel  
B-2-10 stringers with concrete deck.
- Barre - State Highway over Prince River, two 52-foot spans, steel  
B-2-5 stringers with concrete deck.
- Becket - Quarry Bridge over Farnum Brook, one 20-foot span con-  
B-3-45 crete slab.
- Becket - Farnum Bridge over Farnum Brook, one 20-foot span con-  
B-3-46 crete slab.
- Becket - Surriner Bridge over Surriner Brook, one 22-foot span,  
B-3-47 steel stringers with concrete deck.
- Becket - Connors Bridge over branch of Yokum Brook, one 14-foot  
B-3-48 span concrete slab.
- Belchertown - Passo Bridge over Jabish Brook, one 22-foot span,  
B-5-9 steel stringers with concrete deck.
- Belchertown - Hultz Bridge over Hope Brook, three 60-inch metal  
B-5-28 pipes.
- Belchertown - Upper Hultz Bridge, one 8-foot concrete box culvert.  
B-5-30
- Blandford - Tiffany Bridge over Bedlam Brook, one 18-foot span,  
B-14-8 steel stringers with concrete deck.
- Blandford - Shepard Bridge over Virgil Lloyd Brook, one 11-foot  
B-14-9 span concrete slab.
- Blandford - Gore Road over Bedlam Brook, one 16-foot span, steel  
B-14-10 stringers with concrete deck.
- Bourne - Barlow River Bridge, one 83-foot span, through plate  
B-17-1 girder with concrete deck.
- Brimfield - Monson Road over Foskett Mill Street, one 26-foot span,  
B-24-9 steel stringers with concrete deck.



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- Brimfield - Lyman Barnes Bridge over Brickyard Brook, one 22-B-24-31 foot span, steel stringers with concrete deck.
- Brimfield - Five Bridge Road over Wales Brook, three 20-foot B-24-35 spans, timber pile bents with concrete deck.
- Brimfield - State Highway over Elbow Brook, one 40-foot span, B-24-29 steel stringers with concrete deck.
- Buckland - Valiton Bridge over branch of Clesson's Brook, one 52-B-28-1 foot span, steel stringers with concrete deck.
- Buckland - Elmer Will Bridge over Clesson's Brook, one 48-foot B-28-8 span, steel stringers with concrete deck.
- Buckland - Lilly Will Bridge over Clesson's Brook, one 52-foot B-28-12 span, steel stringers with concrete deck.
- Buckland - Hartwell's Bridge over Clesson's Brook, one 32-foot B-28-14 span, steel stringers with concrete deck.
- Buckland - Cemetery Road over Clesson's Brook, one 32-foot span, B-28-15 steel stringers with plank deck.
- Buckland - Anderson Bridge over branch of Clesson's Brook, one 25-B-28-19 foot span, steel stringers with plank deck.
- Buckland - Sereno Howes Bridge over Clesson's Brook, one 32-foot B-28-28 span, steel stringers with plank deck.
- Buckland - Lilly Place over Clesson's Brook, one 32-foot span, B-28-30 steel stringers with plank deck.
- Buckland - Ashfield Road over Clark Brook, one 34-foot span, steel B-28-2 stringers with concrete deck.
- Buckland - Ashfield Road over Clesson's Brook, one 68-foot span, B-28-4 steel stringers with concrete deck.
- Buckland - Forbes Bridge over Clesson's Brook, one 68-foot span, B-28-6 steel stringers with concrete deck.
- Charlemont - Zoar Road over Pelham Brook, one 87-foot span, through #9A steel plate girder with concrete deck.
- Charlemont - Zoar Road over Pelham Brook, one 48-foot span, steel C-5-2 stringers with concrete deck.
- Charlemont - Zoar Road over Pelham Brook, one 52-foot span, steel #8A stringers with open grid deck.

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Charlemont - Meekins Bridge over Mill Brook, one 52-foot span,  
C-5-6 steel stringers with plank deck.

Charlemont - Tower Road over Chickley River, one 73-foot span,  
C-5-8 steel stringers with open grid deck.

Charlemont - Ford Bridge over Chiskley River, one 62-foot span,  
C-5-9 steel stringers with concrete deck.

Charlemont - State Highway over Mill Brook, one 60-foot span,  
C-5-11 steel stringers with concrete deck.

Charlemont - South River Road over Hawkes Brook, one 22-foot span,  
C-5-26 steel stringers with plank deck.

Charlemont - McHaffie Bridge over branch of Deerfield River, one  
C-5-27 22-foot span, steel stringers with plank deck.

Charlemont - Davis Mine Road over Mill Brook, one 53-foot span,  
C-5-47 steel stringers with concrete deck.

Charlemont - Davis Mine Road over Maxwell Brook, one 46-foot span,  
C-5-34 steel stringers with concrete deck.

Cheshire - Savoy Road over Stony Brook, one 40-foot span, steel  
C-10-2 stringers with concrete deck.

Cheshire - Sand Mill Road over Stony Brook, one 40-foot span,  
C-10-3 steel stringers with concrete deck.

Cheshire - Scrabbletown Road over McDonald's Brook, one 34-foot  
C-10-5 span, steel stringers with open grid deck.

Cheshire - Scrabbletown Road over Hoosic River, one 42-foot span,  
C-10-6 steel stringers with open grid deck.

Cheshire - Notch Road over McDonald's Brook, one 34-foot span,  
C-10-16 steel stringers with open grid deck.

Chester - Herring Road over Herring Brook, one 32-foot span, steel  
C-11-22 stringers with concrete deck.

Chester - Kennebrook Bridge over middle branch of Westfield River,  
C-11-24 one 32-foot span and one 33-foot span, steel stringers  
with open grid deck.

Chester - Pierce Bridge over Day Brook, one 22-foot span, steel  
C-11-38 stringers with concrete deck.



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Chester - George Smith Bridge over branch of Westfield River,  
C-11-39 one 24-foot span, steel stringers with concrete deck.

Chester - North Chester Road, one 8-foot span concrete box cul-  
C-11-43 vert.

Chesterfield - Bridge over Stevens Brook, one 57-foot span, steel  
C-12-9 stringers with open grid deck.

Chesterfield - Two culverts over Todd's Brook, 8-foot by 4-foot  
C-12-17 concrete box culverts.  
C-12-18

Chesterfield - Week's Bridge, one 30-foot span, steel stringers  
C-12-19 with concrete deck.

Chesterfield - River Road over branch of Westfield River, one  
C-12-20 8-foot concrete box culvert.

Chesterfield - River Road Bridge, one 12-foot span concrete slab.  
C-12-21

Chicopee - Chicopee Falls Bridge over Chicopee River, four 96-  
C-13-10 foot spans and one 67-foot span, deck plate girders with  
open grid floor.

Chilmark - Harris Creek Bridge, three 16-foot spans, creosoted  
C-14-1 timber piles with concrete deck.

Colrain - Franklin Hill Road over North River, one 110-foot span,  
C-18-1 steel pony truss with open grid deck.

Colrain - Willis Place Bridge over East Branch of North River,  
C-18-2 one 110-foot span, steel pony truss with open grid deck.

Colrain - Jacksonville Road over North River, one 150-foot span,  
C-18-5 steel through truss with open grid deck.

Colrain - Adamsville Road over west branch of North River, one  
C-18-14 110-foot span, steel pony truss with open grid deck.

Colrain - Glen Brown Bridge over west branch of North River, one  
C-18-17 50-foot span, steel stringers with concrete deck.

Colrain - Shelburne Falls Road over North River, two 99-foot  
C-18-10 spans, through plate girders with open grid decking.

Colrain - Lyonsville Road over Foundry Brook, one 37-foot span,  
C-18-25 steel stringers with concrete deck.

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- Colrain - Adamsville Road over Stetson Brook, one 23-foot span,  
C-18-33 steel stringers with concrete deck.
- Colrain - Heath Road over Taylor Brook, two bridges each of one  
C-18-36 25-foot span, steel stringers with concrete deck.  
C-18-37
- Colrain - Heath Road over Taylor Brook, one 50-foot span, steel  
C-18-39 stringers with open grid deck.
- Colrain - Green River Road, one 18-foot span, steel stringers with  
C-18-41 plank deck.
- Colrain - Green River Road, one 21-foot span, steel stringers with  
C-18-42 plank deck.
- Conway - Poland Road over South River, one 40-foot span, steel  
C-20-5 stringers with concrete deck.
- Conway - Route 116 over South River, one 51-foot span, steel  
C-20-6 stringers with concrete deck.
- Cummington - Dudley Manor Bridge, one 128-foot span, steel arch  
C-21-2 with open grid deck.
- Cummington - Luther Shaw Road, one 16-foot span concrete slab.  
C-21-14
- Cummington - Jordan Bridge on Powell Road, one 10-foot span con-  
C-21-15 crete slab.
- Cummington - Stage Road at Davis Brook, one 24-foot span concrete  
C-21-16 slab.
- Cummington - Chesterfield Road, one 10-foot span concrete slab.  
C-21-17
- Cummington - Brush Road over Deer Hill Brook, one 28-foot span,  
C-21-18 steel stringers encased in concrete.
- Dartmouth - Gulf Bridge, four 29-foot spans, concrete pile bents  
D-4-8 with concrete deck.
- Dighton - Broad Cove Bridge at Somerset line, one 65-foot span,  
D-8-1 steel stringers with concrete deck.
- Dudley - West Dudley Bridge over Quinnebaug River, one 120-foot  
D-12-10 span steel pony truss with open grid deck.



- East Brookfield - Podunk Bridge on Charlton Road, one 15-foot span concrete box culvert.  
E-2-11
- East Longmeadow - North Main Street over Pecowsic Brook, one 6-foot span concrete box culvert.  
E-3-2
- Falmouth - Great Pond Bridge, five 29-foot spans, creosoted timber pile bents with steel stringer floor and concrete deck.  
F-3-3
- Falmouth - Eel Pond Bridge, temporary structure.  
F-3-5
- Falmouth - Chappaquoit Bridge, four 29-foot spans, creosoted timber pile bents with steel stringers and concrete deck.  
F-3-9
- Falmouth - Silver Beach Road over Herring River, three 28-foot spans, concrete pile trestle with concrete deck.  
F-3-11
- Falmouth - Meadow Neck Road over Moonakiss River, one 28-foot span, steel stringers with concrete deck.  
F-3-19
- Fitchburg - Cushing Street over Nashua River, two 50-foot spans, steel stringers with concrete deck.  
F-4-15
- Gardner - Keyes Road over Wilder Brook, three 14-foot spans, timber pile bents with plank floor.  
G-1-14
- Gardner - Mill Street at Ramsdell's Pond over Foster Brook, one 32-foot span, steel stringers with concrete deck.  
G-1-19
- Gardner - Mill Street, one 8-foot by 8-foot concrete box culvert.  
G-1-21
- Goshen - Shaw Road over branch of Westfield River, one 64-foot span, steel stringers with concrete deck.  
G-6-4
- Granby - Turkey Hill Bridge, one 15-foot span concrete slab.  
G-9-11
- Granby - Truby Street over Muddy Brook, one 10-foot span concrete slab.  
G-9-12
- Granville - Johnson Bridge over Hubbard River, one 30-foot span, steel stringers with concrete deck.  
G-10-1
- Granville - Hollister Brook Bridge on Old Westfield Road, one 18-foot span, steel stringers with concrete deck.  
G-10-13

- Granville - Water Street over Trumble Brook, one 32-foot span,  
G-10-16 steel stringers with concrete deck.
- Granville - Hunt Bridge, one 18-foot span, steel stringers with  
G-10-22 concrete deck.
- Granville - North Lane #2 over Murphy Brook, one 7-foot by 5-  
G-10-23 foot concrete box culvert.
- Granville - Clement Road over Phelon Brook, one 6-foot by 6-  
G-10-24 foot concrete box culvert.
- Granville - Clement Street over Bronson Hill Brook, one 16-foot  
G-10-25 span, steel stringers with concrete deck.
- Hampden - Hatch Bridge, one 8-foot by 5-foot concrete box culvert.  
H-4-5
- Hampden - Coates Bridge on Main Street, one 18-foot span, steel  
H-4-8 stringers with concrete deck.
- Hampden - Smith Bridge on South Road over Ballard Brook, one 60-  
H-4-6 inch corrugated iron pipe culvert.
- Hampden - Charlie Ballard Bridge on South Road, one 14-foot span,  
H-4-7 steel stringers with concrete deck.
- Hancock - Potter Mountain Road over East Creek, one 28-foot span,  
H-5-2 steel stringers with concrete deck.
- Hancock - Taylor Road over East Creek, one 28-foot span, steel  
H-5-3 stringers with plank deck.
- Hardwick - Gilbertville Bridge over Ware River, temporary bridge.  
H-8-4
- Hardwick - Barre Road over Danforth Brook, one 12-foot by 8-  
H-8-18 foot concrete box culvert.
- Hawley - Fullerville Road Bridge #2 over Fuller Brook, one 45-  
H-13-2 foot span, steel stringers with concrete deck.
- Hawley - Fullerville Road Bridge #1 over Fuller Brook, one 43-  
H-13-3 foot span, steel stringers with concrete deck.
- Hawley - West Hawley Road over Chickley River, one 52-foot span,  
H-13-4 steel stringers with concrete deck.
- Hawley - Forge Hill Bridge over Chickley River, one 52-foot  
H-13-5 span, steel stringers with concrete deck.



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- Hawley - Harold White Bridge over Chickley River, one 115-foot span, steel pony truss with concrete deck.  
H-13-7
- Hawley - Middle Hawley Road over Branch of Chickley River, one 42-foot span, steel stringers with concrete deck.  
H-13-8
- Hawley - Fullerville Road Bridge #3 over Fuller Brook, one 58-foot span, steel stringers with concrete deck.  
H-13-1
- Hawley - Parker Bridge over Chickley River, one 52-foot span, steel stringers with concrete deck.  
H-13-6
- Hawley - East Road over Branch of Deerfield River, one 19-foot span, steel stringers with concrete deck.  
H-13-12
- Heath - Cady Bridge on Jacksonville Stage Road, one 20-foot span, steel stringers with concrete deck.  
H-14-3
- Heath - Jacksonville Stage Road over West Branch Brook, one 25-foot span, steel stringers with concrete deck.  
H-14-7
- Heath - Dell Stetson Bridge over Branch of West Branch Brook, one 10-foot span concrete slab.  
H-14-8
- Heath - Cemetery Bridge on Underwood Hill Road, one 22-foot span, steel stringers with concrete deck.  
H-14-9
- Minsdale - Old Windsor Road over Cady Brook, one 38-foot span, steel stringers with concrete deck.  
H-16-6
- Holland - Wallace Bridge on Morse Road, three 20-foot spans, creosoted timber pile bents with steel stringers and concrete deck.  
H-19-2
- Holland - Drake Bridge over Alexander Brook, one 28-foot span, steel stringers with concrete deck.  
H-19-3
- Holland - Alexander Bridge on Allen Hill Road, two 20-foot spans, wood stringers with plank deck.  
H-19-8
- Holland - Over Stevens Brook, one 15-foot span concrete slab.  
H-19-11
- Holland - Marcy Road over Stevens Brook, one 15-foot span concrete slab.  
H-19-10
- Huntington - County Road Bridge, one 19-foot span, steel stringers with concrete deck.  
H-27-11

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- Huntington - Smith Bridge, one 17-foot span, steel stringers  
H-27-15 with concrete deck.
- Lanesboro<sup>ugh</sup> - Scott Road over branch of Housatonic River, one 22-  
L-3-13 foot span, steel stringers with concrete deck.
- Lee - Ascension Farm Bridge on Meadow Street, one 35-foot  
L-5-4 span, steel stringers with concrete deck.
- Lee - Tyringham Road over East Lee Stream, two 28-foot spans,  
L-5-6 steel stringers with concrete jack arches.
- Lee - Mountain Mill Road over East Lee Stream, one 33-foot  
L-5-7 span, steel stringers with concrete deck.
- Lee - Silver Street over East Lee Brook, one 37-foot span,  
L-5-8 steel stringers with concrete deck.
- Lee - Newton Bridge over Washington Mountain Brook, one 50-  
L-5-16 foot span, steel stringers with open grid deck.
- Lee - Washington Mountain Bridge over Washington Mountain  
L-5-17 Brook, one 44-foot span, steel stringers with open  
grid deck.
- Lee - Navin Bridge over Washington Mountain Brook, one 40-  
L-5-18 foot span, steel stringers with open grid deck.
- Lee - Chestnut Street Bridge over East Lee Stream, one 25-  
L-5-30 foot span concrete slab.
- Lee - Davis Brook Bridge on Chestnut Street, one 22-foot  
L-5-33 span concrete slab.
- Lee - Baird Bridge over East Lee Brook, one 32-foot span,  
L-5-34 steel stringers with plank deck.
- Lee - Picnic Grove Bridge over Schermerhorn Brook, one 12-  
L-5-35 foot span concrete slab.
- Lee - Cordonnier's Bridge over East Lee Stream, one 30-foot  
L-5-24 span, steel stringers with concrete deck.
- Lee - Felton Bridge on Woodland Street, one 9-foot by 4-  
L-5-36 foot concrete box culvert.
- Lenox - New Lenox Road over Yokum Brook, one 12-foot span con-  
L-7-10 crete box culvert.



- Leyden - Greenfield Road over Glen Brook, one 25-foot span, steel stringers with concrete deck.  
L-11-10
- Leyden - Brattleboro Road over branch of Shattuck Brook, one 18-foot span, steel stringers with concrete deck.  
L-11-5
- Leyden - Greenfield Road over branch of Shattuck Brook, one 20-foot span, steel stringers with concrete deck.  
L-11-11
- Ludlow - Parish Brook Bridge, one 15-foot span, steel stringers with concrete deck.  
L-16-11
- Ludlow - Indian Orchard Bridge over Chicopee River at Springfield line, one 182-foot span, steel through truss with open grid deck.  
L-16-16
- Ludlow - Collins Bridge over Chicopee River at Wilbraham line, one 41-foot span and one 50-foot span steel stringers and one 320-foot span steel through truss with open grid deck.  
L-16-3
- Marion - County Road over Sippican River, one 26-foot span, steel stringers with concrete deck.  
M-5-2
- Marlborough - Boundary Street over Assabet River, one 42-foot span, steel stringers with concrete deck.  
M-6-4
- Marlborough - Robin Hill Road over Assabet River, one 52-foot span, steel stringers with concrete deck.  
M-6-3
- Middlefield - Smart Bridge, one 35-foot span, steel stringers with concrete deck.  
M-19-10
- Monroe - River Road over Dunbar Brook, one 42-foot span, steel stringers with concrete deck.  
M-26-5
- Monson - State Highway Route 20 over Quaboag River at Palmer line, two 52-foot spans, steel stringers with concrete slab.  
M-27-22
- Monson - Silver Street over Remington Brook, one 7-foot by 6-foot concrete box culvert.  
M-27-35
- Monson - Cushman Road over Chicopee Brook, one 42-foot span, steel stringers with concrete deck.  
M-27-2
- Monson - Hospital Road over Chicopee Brook, one 37-foot span, steel stringers with concrete deck.  
M-27-10

- Monson - Wales Road over Conant Brook, one 26-foot span, steel  
M-27-15 stringers with concrete deck.
- Montague - Bridge Street over Saw Mill River, one 42-foot span,  
M-28-26 steel stringers with concrete deck.
- Montague - Wendell Road over Saw Mill River, one 42-foot span,  
M-28-34 steel stringers with concrete deck.
- Montague - Mormon Hollow Road over Lyon Brook at Wendell line,  
M-28-35 one 22-foot span, steel stringers with plank deck.
- Montague - Dry Hill Road over Goddard Brook, one 18-foot span,  
M-28-36 steel stringers with concrete deck.
- Monterey - River Road over Rawson Brook, one 44-foot span, steel  
M-29-2 stringers with concrete deck.
- Monterey - Wallace Hill Road over Rawson Brook, one 22-foot span  
M-29-4 concrete slab.
- Monterey - Lankeanu Bridge over Beartown Mountain Brook, one 22-  
M-29-5 foot span concrete slab.
- Montgomery - Carrington Road Bridge #3 over Roaring Brook, one  
M-30-2 37-foot span, steel stringers with concrete deck.
- Montgomery - Carrington Road Bridge #2 over Roaring Brook, one  
M-30-3 37-foot span, steel stringers with concrete deck.
- Montgomery - Carrington Road Bridge #1 over Roaring Brook, one  
M-30-7 36-foot span, steel stringers with concrete deck.
- Mt. Washington - West Street over Wright Brook, one 18-foot span  
M-31-2 concrete slab.
- New Braintree - Hardwick Road over Winimasset Brook, one 29-foot  
N-7-8 span, steel stringers with concrete deck.
- New Marlborough - Alexander Bridge over Umpachene River, two  
N-8-1 44-foot spans, steel stringers with open grid deck.
- New Marlborough - Norfolk Road over Whiting River, one 22-foot  
N-8-3 span, steel stringers with concrete deck.
- New Marlborough - Canaan Valley Road over Whiting River, one 22-  
N-8-4 foot span, steel stringers with concrete deck.
- New Marlborough - Campbells Falls Bridge #1 over Whiting River,  
N-8-5 one 43-foot span, steel stringers with concrete deck.



- New Marlborough - Campbell's Falls Bridge #2 over Whiting River,  
N-8-6 one 40-foot span, steel stringers with concrete deck.
- New Marlborough - Konkapot Road over Konkapot River, one 47-foot  
N-8-9 span, steel stringers with concrete deck.
- New Marlborough - Hayes Hill Road over Konkapot River, one 42-  
N-8-13 foot span, steel stringers with concrete deck.
- New Marlborough - Hartsville Bridge, one 38-foot span, steel  
N-8-16 stringers with concrete deck.
- New Marlborough - Foley Road over Umpachene River, one 32-foot  
N-8-17 span, steel stringers with concrete deck.
- New Marlborough - Canaan Road over Umpachene River, one 36-foot  
N-8-18 span, steel stringers with concrete deck.
- New Marlborough - Keyes Mill Road over Umpachene River, one 42-  
N-8-20 foot span, steel stringers with concrete deck.
- New Marlborough - Madsell Road over Mill River, one 43-foot span,  
N-8-22 steel stringers with concrete deck.
- North Brookfield - Old West Brookfield Road over Coys Brook, one  
N-17-10 10-foot by 7-foot concrete box culvert.
- North Brookfield - Howe Bridge over Five Mile River, one 26-foot  
N-17-1 span, steel stringers with concrete deck.
- North Brookfield - Murphy Road over Sucker Brook, one 18-foot  
N-17-6 span, wood stringers with plank deck.
- North Brookfield - Cider Mill Road over Coys Brook, one 14-foot  
N-17-7 span concrete slab.
- North Brookfield - Bigelow Hollow Road over Coys Brook, one 8-  
N-17-8 foot by 8-foot concrete box culvert.
- North Brookfield - Station 167 over Moore Brook, one 12-foot by  
N-17-9 10-foot concrete box culvert.
- Oakham - Station 19, Route 122 over Mill Pond, one 28-foot span,  
O-2-5 steel stringers with concrete deck.
- Otis - Reservoir Road over Farmington River, one 75-foot span,  
O-5-5 steel stringers with open grid deck.
- Southfield - ...  
S-3-21 ...

- Otis - Schoolhouse Bridge over Miner Brook, one 22-foot  
O-5-17 span concrete slab.
- Otis - Reservoir Road over Reservoir Outlet, one 28-foot span,  
O-5-3 steel stringers with open grid deck.
- Petersham - Butler Bridge over Swift River, two 22-foot spans and  
P-8-2 one 53-foot span, concrete beam and slab.
- Petersham - Parlin Bridge over East Branch of Swift River, one 55-  
P-8-7 foot span, steel stringers with plank deck.
- Pittsfield - Melbourne Road over branch of Housatonic River, one  
P-10-68 27-foot span, steel stringers with concrete deck.
- Plymouth - Red Brook Bridge at Wareham line, one 16-foot span con-  
P-13-18 crete slab.
- Rowe - Zoar Road over branch of Pelham Brook, one 22-foot  
R-10-6 span, steel stringers with concrete deck.
- Rowe - Davis Mine Road over Pelham Brook, one 25-foot span,  
R-10-8 steel stringers with concrete deck.
- Rowe - Church Bridge over branch of Pelham Brook, one 30-  
R-10-7 foot span, steel stringers with concrete deck.
- Royalston - Deland Hill Bridge over Priest Brook, one 21-foot  
R-12-12 span, steel stringers with concrete deck.
- Russell - Center Bridge over Black Brook, one 58-foot span,  
R-13-7 steel stringers with concrete deck.
- Sandisfield - Rugg Bridge over Clam River, one 120-foot span,  
S-3-4 steel truss with open grid deck.
- Sandisfield - Fox Road over Silver Brook, one 30-foot span con-  
S-3-11 crete slab.
- Sandisfield - Cagney Bridge over Sandy Brook, one 22-foot span,  
S-3-14 steel stringers with concrete deck.
- Sandisfield - Fargo Bridge over Clark Brook, one 22-foot span con-  
S-3-19 crete slab.
- Sandisfield - Dubois Bridge over Simons Pond Brook, one 22-foot  
S-3-20 span concrete slab.
- Sandisfield - Veits Bridge over Clark Brook, one 22-foot span con-  
S-3-21 crete slab.



- Sandisfield - Norton Bridge over Norton Brook, one 30-foot span  
S-3-22 concrete slab.
- Sandisfield - Norfolk Road over Sandy Brook, one 22-foot span con-  
S-3-23 crete slab.
- Sandisfield - South Sandisfield Road over Sandy Brook, one 47-foot  
S-3-24 span, steel stringers with concrete deck.
- Savoy - Center Road over branch of Westfield River, one 27-foot  
S-6-3 span, steel stringers with concrete deck.
- Savoy - River Road over Westfield River, one 42-foot span, steel  
S-6-4 stringers with concrete deck.
- Savoy - Hawley Road over Chickley River, one 32-foot span, steel  
S-6-5 stringers with concrete deck.
- Savoy - Scott Road over Chickley River, one 37-foot span, steel  
S-6-6 stringers with concrete deck.
- Savoy - Black Road over Black Brook, one 48-foot span, steel  
S-6-11 stringers with concrete deck.
- Savoy - Brier Road over Black Brook, one 37-foot span, steel  
S-6-13 stringers with concrete deck.
- Sheffield - County Road over Iron Works Brook, one 27-foot span,  
S-10-24 steel stringers with concrete deck.
- Southampton - Russellville Road over Roaring Brook, one 32-foot span,  
S-19-6 steel stringers with concrete deck.
- Southbridge - Woodstock Road over Lebanon Brook, one 10-foot by 12-  
S-21-22 foot concrete box culvert.
- Southbridge - Lebanon Hill Road over Lebanon Brook, one 17-foot  
S-21-30 span, steel stringers with concrete deck.
- Spencer - Seven Mile River Bridge, one 23-foot span, steel string-  
S-23-12 ers with concrete deck.
- Sturbridge - Mashapoag Road over Quinebaug River, two 40-foot spans  
S-30-2 and one 75-foot span, steel stringers with concrete  
deck.
- Sturbridge - Old Farquashar Road over Quinebaug River, one 33-foot  
S-30-3 span, steel stringers with concrete deck.

- Sturbridge - Station 109 on Route 131 over Hobb's Brook, one 20-foot span concrete slab.  
S-30-16
- Sturbridge - Champau Road over Long Pond, three 20-foot spans, creosoted timber pile bents with steel stringers and concrete deck.  
S-30-19
- Swansea - Myles Bridge over Warren River, four 29-foot spans, concrete pile bents, concrete beam and slab deck.  
S-35-1
- Templeton - Thompson Bridge over Otter River, two 26-foot spans and one 30-foot span, steel stringers with open grid deck.  
T-2-1
- Templeton - Baldwinsville Bridge over Otter River, two 26-foot spans and one 30-foot span, steel stringers with concrete deck.  
T-2-2
- Templeton - Depot Street over Otter River, two 24-foot spans and one 28-foot span, steel stringers with concrete deck.  
T-2-4
- Templeton - Hamlet Mill Road over Otter River, two 17-foot spans and one 60-foot span, steel stringers with concrete deck.  
T-2-5
- Templeton - Station 37 on State Highway over Otter River, one 24-foot span, steel stringers with concrete deck.  
T-2-14
- Templeton - Pail Factory Road over branch of Otter River, one 15-foot by 6-foot concrete box culvert.  
T-2-16
- Templeton - Partridgeville Road over branch of Otter River, one 15-foot span concrete slab.  
T-2-17
- Templeton - Pleasant Street, one 10-foot by 15-foot concrete box culvert.  
T-2-18
- Templeton - North Main Street over East Templeton Pond, one 24-foot span, steel stringers with concrete deck.  
T-2-19
- Tolland - Colbrook Road over Cranberry Pond Brook, one 10-foot by 15-foot concrete box culvert.  
T-5-5
- Tolland - Conlan Bridge on Granville Road, one 10-foot by 10-foot concrete box culvert.  
T-5-6
- Tolland - Ward's Bridge over Ward's Brook, one 22-foot span, steel stringers with plank deck.  
T-5-7



- Tolland - Rodgers Bridge on East Otis Road, one 16-foot span  
T-5-8 concrete slab.
- Tyringham - Main Street over Hop Brook, one 47-foot span, steel  
T-10-1 stringers with concrete deck.
- Tyringham - Library Bridge over Hop Brook, one 42-foot span, steel  
T-10-3 stringers with concrete deck.
- Tyringham - Camp Brook Bridge on Fenn Road, one 22-foot span, steel  
T-10-6 stringers with concrete deck.
- Tyringham - Monterey Road over Hop Brook, one 28-foot span, steel  
T-10-7 stringers with concrete deck.
- Ware - East Street over Ware River, one 50-foot span concrete  
W-5-4 arch and three 15-foot spans concrete slab.
- Ware - Malboeuf Bridge, one 77-foot span, steel through plate  
W-5-7 girder with open grid deck.
- Ware - North Street Bridge, one 37-foot span, steel stringers  
W-5-12 with concrete deck.
- Ware - Darling's Bridge over Beaver Brook, one 22-foot span,  
W-5-24 steel stringers with concrete deck.
- Wareham - Agawam Road over Wareham River, seven 26-foot spans,  
W-6-1 concrete pile bents with concrete beam and slab deck;  
and one 35-foot span, steel stringers with concrete  
deck.
- Warren - Station 60 over Dean Brook, one 26-foot span, steel  
W-7-12 stringers with concrete deck.
- Warren - Cronin Road, one 8-foot span concrete slab.  
W-7-17
- Warren - South Street over Wigwam Brook, one 12-foot span con-  
W-7-16 crete slab.
- Warren - Grist Mill Bridge over Quabaug River, two 50-foot spans,  
W-7-2 steel stringers with concrete deck.
- Washington - Bennett Bridge on Lovers' Lane Road, one 22-foot span,  
W-9-16 steel stringers with concrete deck.
- Webster - Sucker Brook Bridge, one 12-foot span concrete slab.  
W-12-19

- West Brookfield - Sucker Brook Road over Mill Brook, one 18-foot span, steel stringers with concrete deck.  
W-19-8
- West Brookfield - Mill Brook Bridge, one 21-foot span, steel stringers with concrete deck.  
W-19-10
- West Brookfield - Bridge over Mill Brook, one 32-foot span, steel stringers with plank deck.  
W-19-11
- West Stockbridge - Pittsfield Branch Road over Cone Brook, one 20-foot span concrete slab.  
W-22-12
- Westfield - Sandy Hill Road over Powder Mill Brook, one 32-foot span, steel stringers with concrete deck.  
W-25-31
- Westfield - Tekoa Bridge on Pochassie Road, one 32-foot span, steel stringers with concrete deck.  
W-25-32
- Westhampton - Parson's Bridge, one 42-foot span, steel stringers with concrete deck.  
W-27-1
- Westhampton - Meadow Bridge over North Branch of Manhan River, one 42-foot span, steel stringers with concrete deck.  
W-27-3
- Westhampton - Witherill Mill Bridge, three 36-inch metal pipe culverts.  
W-27-11
- Westhampton - Loud's Bridge, one 12-foot concrete slab.  
W-27-14
- Westhampton - North Road over Bridgman's Brook, one 30-foot span, steel stringers with concrete slab.  
W-27-15
- Westhampton - Shaw's Corner Bridge, one 23-foot span, steel stringers with concrete deck.  
W-27-16
- Westhampton - Norris Bridge, one 18-foot span concrete slab.  
W-27-17
- Westminster - Depot Street over Round Meadow Brook, one 21-foot span, steel stringers with concrete deck.  
W-28-19
- Wilbraham - Carter Culvert on Springfield Road, one 10-foot by 6-foot concrete box culvert.  
W-35-15
- Williamstown - Walley Bridge over Green River, two 50-foot spans, steel stringers with concrete deck.  
W-37-15



- Windsor - East Windsor Road over Westfield Brook, one 32-foot span, steel stringers with open grid deck.  
W-41-5
- Windsor - Dalton Road over East Branch of Housatonic River, one 35-foot span, steel stringers with concrete deck.  
W-41-6
- Windsor - River Road over Westfield River, one 52-foot span, steel stringers with concrete deck.  
W-41-8
- Windsor - Bush Schoolhouse Road over branch of Westfield River, one 32-foot span, steel stringers with concrete deck.  
W-41-9
- Windsor - Axe Factory Bridge over Westfield River, one 48-foot span, steel stringers with concrete deck.  
W-41-12
- Windsor - Flintstone Road over Branch of Housatonic River, one 17-foot span, steel stringers with plank deck.  
W-41-23
- Worthington - South Worthington Road Bridge, one 47-foot span, steel stringers with concrete deck.  
W-45-1
- Worthington - Huzzar Bridge, one 62-foot span, steel stringers with concrete deck.  
W-45-4
- Worthington - Snyder Bridge, one 39-foot span, steel stringers with concrete deck.  
W-45-6
- Worthington - Dingle Road Bridge, one 21-foot span, steel stringers with concrete deck.  
W-45-8
- Worthington - Cheney Bridge over East Branch of Bronson Brook, one 26-foot span, steel stringers with concrete deck.  
W-45-20
- Worthington - Ford Knapp Bridge, one 42-foot span, steel stringers with concrete deck.  
W-45-21
- Worthington - Adams Road Bridge, one 23-foot span, steel stringers with concrete deck.  
W-45-23
- Worthington - Burr's Bridge, one 37-foot span, steel stringers with concrete deck.  
W-45-24

BRIDGES BUILT OR CONTRACTED FOR  
(EXCLUSIVE OF THOSE DESTROYED BY FLOOD).

- Athol - Main Street over B. & M.R.R., one 82-foot span, steel through plate girder with concrete deck.  
A-15-15

~~Annex 2, Chapter 21~~

~~1/16/1914~~

- Becket - Washington Road over Walker Brook, one 15-foot span, concrete slab. ~~Span, steel stringers with concrete deck.~~  
B-3-28
- Bridgewater - At Halifax line, Cherry Street over Taunton River, seven 15-foot spans, creosoted timber pile trestle with concrete deck.  
B-23-7  
B-2-3
- Gloucester - Washington Street over Mill River, one 18-foot span concrete slab. ~~For stringers and plank deck.~~  
G-5-3
- Lowell - Removal of temporary foot bridge used during construction of Central Bridge over Merrimack River and repair of approaches.  
L-15-19
- Mansfield - Elm Street, pedestrian underpass under New Haven R.R.  
M-3-16  
~~Blackstone Street over Meadow Brook, one 2-foot span.~~
- Marblehead - Village Street over B. & M.R.R., one 46-foot span, steel stringers with concrete deck.  
M-4-1  
~~Locals Village Road over Locals Brook, one 12-foot span.~~
- Millville - Central Street, one 69-foot span, steel stringers with concrete deck over Blackstone River and one 21-foot span concrete beam over Raceway.  
M-24-6  
M-24-7
- Montague - Sunderland Road over C.V.R.R., one 36-foot span, one 44-foot span and one 47-foot span, steel stringers with concrete deck.  
M-28-32
- Newburyport - High Street over B. & M.R.R., one 19-foot span, steel stringers with concrete deck.  
N-11-4  
~~A-4-17~~
- North Adams - Massachusetts Avenue over Northam Creek, one 9-foot span concrete slab. ~~Repairs to headwall.~~  
N-14-29  
~~A-4-23~~
- Northfield - Hinsdale Road over Perchog Brook, one 17-foot span box culvert. ~~Street over Locust Brook, repairs to abutment and superstructure.~~  
N-22-5
- Northfield - Warwick Road over Mill Brook, one 17-foot span, steel stringers with concrete deck. ~~Locust Brook, repairs to abutment.~~  
N-22-6
- Palmer - Dutton Bridge over Ware River, two 45-foot spans and one 65-foot span, steel stringers with concrete deck.  
P-1-13
- Peabody - Andover Street over Northern Circumferential Highway, two 41-foot spans, steel stringers with concrete deck.  
P-3-16
- Pittsfield - South Street over New Haven R.R., one 49-foot span, steel stringers with concrete deck. ~~Repairs to abutment.~~  
P-10-3



- Pittsfield - East Street over Housatonic River, two 40-foot spans  
P-10-30 and one 54-foot span, steel stringers with concrete deck.
- Sharon - Garden Street under New Haven R. R., pedestrian under-  
S-9-5 pass.
- Shrewsbury - West Main Street over Lake Quinsigamond, one 18-  
S-14-12 foot span, timber stringers and plank deck.
- Sutton - Worcester-Uxbridge Highway over Cold Spring Brook,  
S-33-15 one 20-foot span concrete slab.
- Tewksbury - Wamesit Crossing over B. & M.R.R., three 50-foot spans,  
T-3-8 steel stringers with concrete deck.
- Uxbridge - Blackstone Street over Meadow Brook, one 9-foot span,  
U-2-37 multiplate metal arch culvert.
- Wendell - Lockes Village Road over Locke Brook, one 15-foot  
W-15-8 span concrete slab.

West Springfield - Riverdale Road, 280 feet of dike wall.  
W-21-20

BRIDGES REPAIRED TO REMEDY DAMAGE  
BY FLOOD

- Adams - Cook Street over Hoosic River, repairs to abutment and  
A-4-17 superstructure.
- Adams - Powers Street Culvert, repairs to headwall.  
A-4-29
- Adams - North Summer Street over Tophet Brook, repairs to abut-  
A-4-31 ment and superstructure.
- Ashburnham - Whitney Hill Road over Phillips Brook, repairs to  
A-11-3 abutment.
- Barre - South Barre Road over Ware River, construction of new  
B-2-7 abutment.
- Barre - Canesto Bridge, repairs to abutment.  
B-2-18
- Becket - Yokum Pond Road over Reservoir Brook, repairs to abut-  
B-3-49 ments.

- Becket - Prentice Bridge over Saw Mill Brook, construction of  
B-3-24 new pier.
- Blandford - Russell Stage Road over Freeland Brook, repairs to  
B-14-4 abutments.
- Brimfield - John Haley Road over Penny Brook, repairs to abutments  
B-24-36 on two bridges.  
B-24-37
- Buckland - Hawley Road over Clesson's Brook, repair of wing wall.  
B-28-10
- Buckland - Wagner's Bridge, clearance of debris and placing rip-  
B-28-7 rap.
- Cheshire - Savoy Road over Pumpkin Brook, repairs to wing walls.  
C-10-10
- Cheshire - Harper Road, repairs to abutment and steel truss super-  
C-10-7 structure.
- Chester - Herring Bridge over Middle Branch of Westfield River,  
C-11-21 new steel stringer superstructure with concrete deck.
- Chester - State Highway Route 20 over Walker Brook, repairs to  
C-11-28 abutments.
- Chester - Dayville Road over Fiske Brook, repairs to superstruc-  
C-11-47 ture and abutments.
- Clarksburg - Middle Road over Hudson Brook, repairs to wing wall  
C-15-2 and abutment.
- Colrain - Griswoldville #2 Bridge over North River, repairs to  
C-18-8 wing walls.
- Colrain - Riel Bridge over North River, repairs to abutment.  
C-18-6
- Colrain - Hilman Bridge over North River, repairs to wing walls.  
C-18-19
- Colrain - Frank Herzig Bridge and culvert over North River, re-  
C-18-16 pairs to wing walls.  
C-18-20
- Colrain - Jacksonville Road over North River, repairs to sub-  
C-18-28 structure and superstructure.



- Colrain - Harris Bridge over Spur Brook, repairs to wing walls.  
C-18-31
- Colrain - Gilderdale Bridge over Spur Brook, clearance of debris  
C-18-32 from bridge channel.
- Colrain - Saunders Brook Bridge, repairs to bed of stream at  
C-18-29 bridge.
- Colrain - Goudreau Bridge over Hilman Brook, repairs to super-  
C-18-35 structure, and substructure.
- Dalton - Crane Culvert on South Street, repairs to end walls.  
D-1-16
- Dalton - Grange Hall Road, replacement of pipe culvert.  
D-1-17
- Dartmouth - Padanaram Bridge, repairs to superstructure and end  
D-4-2 walls.
- Dudley - State Highway over Quinnebaug River and Canal, repairs  
D-12-26 to substructure and superstructure.
- Fairhaven - Coggeshall Bridge at New Bedford line, repairs to super-  
F-1-1 structure.
- Fall River - Brightman Street Bridge at Somerset line, repairs to  
F-2-2 superstructure.
- Falmouth - Bridge over Bowen's Pond Outlet, repairs to super-  
F-3-18 structure.
- Florida - Savoy Road over Tower Brook, repairs to abutment.  
F-5-7
- Florida - South County Road over Cold River, repairs to substructure  
F-5-2 and superstructure.
- Granby - Morgan Street Bridge, repairs to substructure.  
G-9-5
- Granville - Over Hubbard River at Tolland line, repairs to wing  
G-10-9 walls.
- Granville - Chapman Brook Bridge, repairs to substructure and super-  
G-10-10 structure.
- Hatfield - Chestnut Street over Mill River, repairs to substructure  
H-11-5 and superstructure.

- Hatfield - Pine Brook Bridge on River Road, repairs to substructure and superstructure.  
H-11-17
- Hinsdale - May Road over Gady Brook, repairs to superstructure and substructure.  
H-16-19
- Holland - Stafford Road over Stevens Brook, repairs to substructure.  
H-19-12
- Hubbardston - New Road over Brigham's Pond, repairs to superstructure.  
H-24-9
- Monson - Pond Road over Conant Brook, repairs to substructure.  
M-27-19
- Monson - Butler Road Bridge over Shaw Brook, repairs to substructure.  
M-27-37
- Monson - Hampden Avenue over Chicopee Brook, repairs to substructure.  
M-27-14
- Monson - Bunyan Road over Chicopee Brook, repairs to substructure.  
M-27-30
- Monson - Dickinson Road over Twelve Mile Brook, repairs to substructure.  
M-27-32
- Monson - Mechanic Street over Mill Brook, repairs to substructure.  
M-27-33
- Monson - State Street over Chicopee River, repairs to substructure.  
M-27-3
- New Marlborough - Mill River Road over Mill River, repairs to substructure.  
N-8-12
- Otis - Station 37 on Route 8, repairs to substructure.  
O-5-8
- Peru - Bryan Road over Tuttle Brook, repairs to superstructure and substructure.  
P-7-5
- Peru - Pierce Road, repairs to superstructure and substructure.  
P-7-8
- Petersham - Quaker Drive over East Branch of Swift River, repairs to substructure.  
P-8-5
- Petersham - Quaker Drive over Moccasin Brook, repairs to substructure.  
P-8-8



- Rowe - Paper Mill Bridge over Deerfield River at Monroe line, repairs to wings.  
R-10-2
- Rowe - Newell Bridge over Pelham Brook, repairs to substructure.  
R-10-3
- Rowe - Lesure's Road over Pelham Brook, repairs to substructure.  
R-10-10
- Royalston - King Street over Millers River, repairs to substructure.  
R-12-14
- Royalston - Baldwinville Road over Millers River, repairs to bridge approach.  
R-12-15
- Sandisfield - Lair Bridge over Farmington River, repairs to substructure.  
S-3-5
- Sandisfield - Station 127 on Route 8 over Farmington River, repairs to substructure.  
S-3-7
- Savoy - Black Brook Road Bridge, repairs to abutment.  
S-6-12
- Savoy - Jackson Road over branch of Chickley River, repairs to superstructure and substructure.  
S-6-17
- Spencer - Brooks Pond Bridge, repairs to substructure.  
S-23-16
- Spencer - Thompson Pond Bridge, repairs to substructure.  
S-23-17
- Stockbridge - Hanna Farm Bridge, repairs to substructure.  
S-26-9
- Washington - Lovers' Lane Road over Little Brook, repairs to substructure.  
W-9-17
- West Stockbridge - Alford Road over Williams River, repairs to substructure.  
W-22-5
- Westhampton - Egypt Hill Bridge, repairs to substructure.  
W-27-4
- Westhampton - Chesterfield Road over Shaw Brook, repairs to substructure.  
W-27-12
- Westhampton - Burt's Bridge over branch of Manhan River, repairs to substructure.  
W-27-2

Westport - Westport Point Bridge over Westport River, repairs to superstructure and substructure.  
W-30-1

Williamsburg - Drugstore Bridge, repairs to substructure.  
W-36-6

Worthington - Station 552 on Route 112 over Little River, repairs to substructure.  
W-45-14

Worthington - Station 458 on Route 112 over Ward's Stream, repairs to substructure.  
W-45-15

BRIDGES ALTERED OR REPAIRED  
(EXCLUSIVE OF THOSE DAMAGED BY FLOOD).

Brockton - Howard Street over Trout Brook, reinforced concrete extension of existing arch.  
B-25-44

Edgartown - At Oak Bluffs line, construction of sidewalks on existing bridge.  
E-7-1

Erving - At Gill line, French King Bridge, repairs to curb.  
E-10-4

Haverhill - At Methuen line, Bradley Avenue over Hawkes Brook, extension to existing arch.  
H-12-32

Lawrence - Den Rock Road over Shawsheen River, extension to existing reinforced concrete beam bridge.  
L-4-21

Wellfleet - Chequesett Neck Road over Herring River, pile extension of existing bridge.  
W-14-7

EXAMINATIONS, REPORTS, ESTIMATES, ETC.,  
AT REQUEST OF LOCAL AUTHORITIES

Adams - Dean Street Bridge over Hoosic River.  
A-4-11

Barnstable - Grand Island Bridge.  
B-1-3

Concord - Pine Street Bridge over Assabet River.  
C-19-19

Grafton - Depot Street Bridge over Blackstone Canal.  
G-8-22

Granville - West Hartland Road Bridge over Hubbard River.  
G-10-1



- Greenfield - Petty Plain Road Bridge over Green River.  
Hatfield - Chestnut Street Bridge over Mill River.  
H-11-13  
Lee - Bridge on Route 102 over New Haven Railroad.  
L-5-1  
Lee - Covered wooden bridge over Housatonic River.  
L-5-3  
Uxbridge - Depot Street Bridge over Mumford River.  
U-2-8

EXAMINATIONS, REPORTS, ESTIMATES, ETC.,  
AT REQUEST OF DEPARTMENT AUTHORITIES.

- Agawam - At Springfield line, South End Bridge over Connecticut River.  
A-5-1  
Agawam - At West Springfield line, bridge over Westfield River.  
A-5-2  
Cummington - Plainfield Road Bridge over Westfield River.  
C-21-4  
Greenfield - At Montague line, Montague City Bridge over Connecticut River.  
G-12-20  
Leicester - State Highway Bridge over Kettle Brook.  
L-6-14  
Northampton - South Street Bridge over New Haven Railroad and over Mill River.  
N-19-3  
Northampton - South Street Bridge over Clark Street.  
N-19-19  
Oxford - Retaining wall built under W.P.A. project.

BRIDGES FOR WHICH PLANS WERE EXAMINED  
UNDER THE PROVISIONS OF SECTION 35, CHAPTER 85,  
GENERAL LAWS (TERCENTENARY EDITION).

- Fitchburg - Water Street over Nashua River, steel deck plate girder.  
F-4-18  
Grafton - Bridge Street over Quinsigamond River, steel stringer bridge.  
G-8-17

~~Monson~~ ~~Wales Road~~ 4/1/29

~~3/15/39~~

Monson - Wales Road, stone arch bridge.  
M-27-15

Revere - Revere Street over B. & M.R.R.  
R-5-11

Uxbridge - Depot Street over Mamford River.  
U-2-8

BRIDGES FOR WHICH PLANS, STUDIES, OR ESTIMATES  
HAVE BEEN MADE, TO REPLACE OR REPAIR BRIDGES  
DAMAGED BY FLOOD.

Amherst - North Pleasant Street over Mill River.  
A-8-11

Ashburnham - Bridges on Lake Road, Cross Road, Williams Road,  
A-11-16 A-11-17 Sherbert Road, Mill Street, Dunn Road, and Main  
A-11-18 A-11-1 Street.  
A-11-6 A-11-10  
A-11-19

Ashfield - Spruce Corner Bridge, Kelley Bridge, Emmet's  
A-13-17 A-13-22 Bridge, Underhill Bridge, McKellogit Bridge,  
A-13-16 A-13-19 Claude Church Bridge, Pfersick Bridge, School  
A-13-27 A-13-9 House Bridge, Leon Hall Bridge, Bellus Hill  
A-13-18 A-13-20 Bridge and Watson Road Bridge.  
A-13-15 A-13-21  
A-13-28

Athol - Bridges on Washington Street and Dee Valley  
A-15-4 A-15-26 Road

Becket - Blandford Hill Road Bridge.  
B-3-50

Belchertown - Tylerville Bridge and Barrett Junction Bridge.  
B-5-6 B-5-29

Brimfield - West Brimfield Bridge, Dunhamtown Bridge, Hol-  
B-24-14 B-24-38 land Road Bridge, and Fenton Bridge (at Palmer  
B-24-2 B-24-12 line).

Brookfield - Lake Road Bridge.  
B-26-11

Buckland - Apple Valley Bridge and Shedd's Bridge.  
B-28-29 B-28-18



Charlemont - Bridges on Gilead Road, Burnett Road, Tatro Road (Upper, Middle and Lower Bridges), Hicks Road, Bissell Covered Bridge, Kinney Upper Road, Fleury Road, Harris Mt. Road, Leland Road, Avery Brook Road, Bremer Road, West Oxbow Road (Leazer, Barnes, and Harris Bridges), East Oxbow Road (Adams, Third and First Bridges), Kinney Lower Road, and at Station 526 on the State Highway.

C-5-4 C-5-32  
C-5-28 C-5-29  
C-5-30 C-5-31  
C-5-5 C-5-48  
C-5-36 C-5-50  
C-5-43 C-5-23  
C-5-35 C-5-37  
C-5-38 C-5-33  
C-5-39 C-5-40  
C-5-42 C-5-49  
C-5-16

Charlton - Mill Road Bridge.  
C-6-25

Cheshire - Choquette Bridge  
C-10-1

Chester - Bridges on Miller Road, Johnson Hill Road, Round Hill Road, Blandford Hill Road #9, Snow Bridge, Eastman Bridge, and Blandford Hill Road #20.  
C-11-20 C-11-17  
C-11-7 C-11-45  
C-11-1 C-11-18  
C-11-46

Colrain - Gallipos Bridge, Adamsville Bridge, and Cata-mount South Section Bridge.  
C-18-38 C-18-18  
C-18-43

Conway - James Rice Bridge, Koeber Bridge, Tommy Harrison Bridge, South Berkshire Bridge, Collins Bridge and Poland Road Bridge.  
C-20-1 C-20-26  
C-20-2 C-20-19  
C-20-3 C-20-4

Cummington - Covered Bridge on New Plainfield Road, Davis Bridge, and Tirrell Homestead Bridge.  
C-21-4 C-21-19  
C-21-13

Dartmouth - Gulf Hill Road.  
D-4-8

Easthampton - Glendale Village Bridge at Southampton line.  
E-5-10

Edgartown - Bridges on Creek Road and Katama Road.

Erving - East Mineral Road Bridge at Montague line and Millers Falls Bridge on Route 63 at Montague line.  
E-10-1 E-10-2

Fall River - Brightman Street Bridge at Somerset line.  
F-2-1

Falmouth - Woods Hole Bridge.  
F-3-5

Gardner - Bridges on Clark Street, Pail Factory Road,  
G-1-20 G-1-22 Travers Street, and at Station 68 on the State  
G-1-23 G-1-24 Highway.

Gill - North Cross Road Bridge.  
G-4-11

Goshen - Station 140+22 on State Highway.  
G-6-1

Hardwick - Bridges at Gilbertville, Lower Road, Greenwich  
H-8-4 H-8-15 Road, Taylor Hill Road, Shaft #11 Road,  
H-8-16 H-8-5  
H-8-17

Hawley - Bridges at Middle Road, East Road, Forget Branch  
H-13-11 H-13-10 Road and Buckland Road.  
H-13-14 H-13-15

Heath - Kinsman's Upper Bridge, Kinsman's Bridge, Ryan's  
H-14-11 H-14-12 Bridge, Lower Bridge and Middle Bridge.  
H-14-13 H-14-14  
H-14-15

Hubbardston - Bridges at Natty Brook Road, Williamsville Road,  
H-24-7 H-24-3 Pitcherville Road, Birch Road, Depot Road, Hale  
H-24-8 H-24-10 Road, Templeton Road and Ragged Hill Road.  
H-24-11 H-24-12  
H-24-4 H-24-13

Huntington - Factory Foot Bridge and Emerson Road Bridge.  
H-27-18 H-27-14

Lanesborough - Bull Hill Road Bridge.  
L-3-8

Leverett - Teewaddle Hill Road Bridge.  
L-9-1

Leyden - Two bridges on Greenfield Road and a bridge on  
L-11-10 L-11-11 Brattleboro Road.  
L-11-5

Pittsfield -  
P-11-13  
P-11-14  
P-11-15  
P-11-16  
P-11-17



Middlefield - Clark Wright Bridge and Town Hill Road Bridge.

M-19-8

M-19-4

Monroe - Bridge on Turner Hill Road.

M-26-3

Monson - Bridge on Bradway Street.

M-27-36

Montague - Saw Mill River Bridge.

M-28-33

New Braintree - Barr Road Bridge.

N-7-4

North Adams - Bridge at Phelps Avenue and Depot Street.

N-14-3

North Brookfield - Mill Road Bridge.

N-17-11

Northfield - Sturbridge Road Bridge.

N-22-10

Oakham - Bridges on Pine Plain Road, North Brookfield Road  
O-2-4 O-2-8 and Hardwick Road.

O-2-3

Orange - Two bridges on Tully Road.

O-3-2

O-3-5

Otis - Gibbs Road Bridge

O-5-18

Palmer - Burleigh Bridge, Canal Bridge, Bridge Street Bridge,  
P-1-6 P-1-14 Thorndike Bridge and Wipples Crossing.

P-1-4 P-1-17

P-1-18

Phillipston - Queens Lake Road Bridge.

P-9-2

Pittsfield - Hubbard Avenue Bridge.

P-10-31

Plainfield - High Bridge, Beals Bridge, culvert on West Cum-

P-11-3 P-11-13 mington Road, culvert on Barry Road, Williams

P-11-8 P-11-9 Bridge, Willcutt's Bridge, McLeod Bridge and

P-11-14 P-11-12 Rice's Bridge.

P-11-11 P-11-10

- Royalston - Bridges on South Royalston Road, Winchendon  
 R-12-2 R-12-13 Road, White Mill Yard Bridge, and two bridges  
 R-12-18 R-12-1 on Turnpike Road.  
 R-12-19
- Russell - Davison Bridge.  
 R-13-4
- Rutland - Charnock Road Bridge.  
 R-14-13
- South Hadley - Bridges at Ferry Street and River Street.  
 S-18-1  
 S-18-8
- Southbridge - Mechanic Street Bridge.  
 S-21-6
- Spencer - South Spencer Road Bridge.  
 S-23-19
- Ware - South Street Bridge.  
 W-5-5
- Wareham - Dummy Bridge.  
 W-6-17
- Warren - River Street Bridge.  
 W-7-1
- Warwick - Northfield Road Bridge.  
 W-8-6
- Washington - Farnham Bridge.  
 W-9-18
- West Stockbridge - Pittsfield Road Bridge.  
 W-22-15
- Westminster - Ellis Street Bridge.  
 W-28-20
- Westport - Mix Bridge.  
 W-30-2
- Whately - Two bridges on Chestnut Plain Road and two  
 W-33-2 W-33-6 bridges on Williamsburg Road.  
 W-33-11 W-33-18
- Williamsburg - Goshen Road Bridge.  
 W-36-15



~~Summary Report~~ / 11/34

~~5/7/39~~

Winchendon - Bridges on Winchendon Springs Road, Kilbourn Road, Robbins Road, Harrisville Road, Bullardville Road and Happy Hollow Road.  
W-39-4 W-39-8  
W-39-26 W-39-1  
W-39-15 W-39-27

Windsor - Pelly Bridge and North Street Bridge.  
W-41-20 W-41-21

Worthington - Almond Johnson Bridge.  
W-45-26

BRIDGES FOR WHICH PLANS, STUDIES, OR ESTIMATES  
HAVE BEEN MADE (EXCLUSIVE OF BRIDGES  
DESTROYED OR DAMAGED BY FLOOD).

Ashburnham - Gardner Road over B. & M.R.R.  
A-11-20

Ashland - Main and Cherry Streets over B. & A.R.R.  
A-14-17

Ashland - Main Street pedestrian underpass under B. & A.R.R.  
A-14-18

Ayer - Grade crossing elimination east of town over B. & M.R.R.

Becket - Washington Road over Walker Brook.  
B-3-2

Becket - Main Street grade crossing elimination.

Belchertown - Granby Road over B. & M.R.R.  
B-5-15

Bellingham - South Main Street over New Haven R. R.  
B-6-11

Bernardston - Hale's Crossing over B. & M.R.R.  
B-10-12

Beverly - Elimination of grade crossing at Paradise Crossing and B. & M.R.R.  
B-11-8

Beverly - Salem-Beverly by-pass over Cabot Street and over Dodge Street.  
B-11-9 B-11-10

Boston - At Cambridge line, Traffic Circle at Prison Point Bridge.  
B-16-129

Boston - At Milton line over Neponset River.  
B-16-223

- Boston - At Milton line, Paul's Bridge over Neponset River.  
B-16-224
- Boston - Porter Street over B. & A.R.R.  
B-16-225
- Boston - Tunnel Road under Prescott Street, under Ben-  
B-16-226 nington and Neptune Streets, and under Sara-  
B-16-228 toga Street.
- Boston - Grade separation at East Milton Street and Matta-  
B-16-230 pan connection.
- Boston - Grade crossing elimination at Bird Street.
- Brimfield - Sturbridge Road over Mill Brook.  
B-24-3
- Brookline - Highway separations at Brookline Village and  
B-27-10 B-27-11 Cypress Streets.
- Charlmont - Depot Street over Deerfield River.  
C-5-10
- Chelmsford - Middlesex Turnpike over River Meadow Brook,  
C-8-12 under River Neck Road, over New Haven R.R.,  
C-8-14 C-8-15 over Chelmsford Street, under Steadman Street,  
C-8-16 C-8-17 over Parkhurst Street, under Westford Road,  
C-8-18 C-8-19 and under North Road.
- Cheshire - Auto Route 8 over B. & A.R.R.  
C-10-14
- Chesterfield - First Bridge and Second Bridge over Stevens  
C-12-10 C-12-11 Brook.
- Chicopee - Plainfield Street grade crossing elimination.
- Dalton - Housatonic Street over East Branch Housatonic  
D-1-8 River.
- Danvers - Salem Turnpike under B. & M. R.R.  
D-3-5
- Danvers - Newburyport Turnpike under Andover Street.  
D-3-17
- Danvers - Northern Circumferential Highway, eight bridges.  
D-3-18 D-3-19  
D-3-20 D-3-21  
D-3-22 D-3-23  
D-3-24 D-3-25



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- East Bridgewater - Bedford Street over Forge Pond.  
E-1-3
- Fall River - At Somerset line, Brightman Street Bridge repairs.  
F-2-1
- Fall River - At Westport line, Bulgermarsh Road over Stony Brook.  
F-2-38
- Falmouth - Nashawena Street over Nashawena Creek.  
F-3-10
- Falmouth - Silver Beach Road over New Haven R.R.  
F-3-12
- Fitchburg - Concord cut-off over Woodbury Mill Pond.  
F-4-41
- Gloucester - Essex Avenue under B. & M.R.R.  
G-5-7
- Grafton - Depot Street over Blackstone Canal.  
G-8-22
- Hadley - Maple Street over Mill River.  
H-1-3
- Hatfield - West Street over Mill River.  
H-11-6
- Haverhill - River Street over Bradley Brook.  
H-12-4
- Holliston - Washington Street over B. & A.R.R.  
H-20-6
- Huntington - At Knightville Reservoir, two bridges.  
H-27-8 H-27-19
- Ipswich - Widening of Choate Bridge.
- Ipswich - Grade separation of Linebrook Road and Newburyport Turnpike.  
I-1-14
- Lee - Auto Route 20 over Housatonic River, repairs.  
L-5-11
- Leominster - Concord cut-off under New Haven R.R. and under North Main Street.  
L-8-23  
L-8-24
- Leverett - Long Plain Road grade crossing elimination.

- Lincoln - South Great Road over B. & M. R. R.  
L-12-4
- Lynnfield - Northern Circumferential Highway, five bridges.  
L-19-4 L-19-7  
L-19-8 L-19-9  
L-19-10
- Maynard - Great Road over Mill Canal.  
M-10-9
- Medfield - At Millis line, Dwight Street over Charles River.  
M-11-4
- Milton - Proposed road over New Haven R. R.  
M-25-9
- Monroe - Valley Road over Dunbar Brook.  
M-26-5
- Newton - At Weston line, Northern Circumferential Highway  
N-12-8 over Charles River.
- Newton - At Wellesley line over Charles River.  
N-12-54
- North Adams - State Street over B. & M.R.R. and Hoosic River.  
N-14-18
- North Adams - Williamstown Road over a brook, widening existing  
N-14-28 stone arch.
- North Adams - Massachusetts Avenue over a raceway.  
N-14-31
- North Andover - Boxford Road over Mosquito Brook.  
N-15-9
- Peabody - Lowell Street over Newburyport Turnpike.  
P-3-1
- Petersham - Choates Bridge on Barre Road.
- Randolph - North Street over New Haven R. R.  
R-1-2
- Revere and Saugus - Route 107, three bridges.
- Rowley - Newburyport Turnpike under Haverhill Street  
R-11-5



- Salisbury - Elm Street over E. & M.R.R.  
S-2-1
- Scituate - Gannett Street, two bridges  
S-7-10  
S-7-11
- Shirley - Main Street grade crossing elimination.
- Shrewsbury - Southwest Connection over Flint Pond, over Lake  
S-14-8 S-14-10 Quinsigamond, and over Grafton St.  
S-14-11
- Southwick - College Highway over Uncle Oliver's Brook.  
S-22-5
- Southwick - State Highway over Webb Brook.  
S-22-11
- Sudbury - Boston Post Road over Parmenter Mill Pond.  
S-31-4
- Sudbury - Worcester Road over New Haven R. R.  
S-31-7
- Sutton - Worcester Road over Wilkinsonville Road and over  
S-33-12 Central Turnpike.  
S-33-14
- Swansea - Wilbur Avenue over Coles River.  
S-35-2
- Topsfield - Newburyport Turnpike under Ipswich Road.  
T-6-12
- Upton - Hopkinton Road over a brook.  
U-1-14
- Ware - Gibbs Crossing grade elimination.
- West Bridgewater - West Center Street over Hockamuck River.  
W-18-12
- West Stockbridge - State Line Road, three bridges.  
W-22-11 W-22-13  
W-22-14
- Weston - Circumferential Highway over South Avenue and over  
W-29-12 Weston Aqueduct.  
W-29-13

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During Winchendon - New Boston Road over B. & M.R.R.  
W-39-23

Winchendon - Pequog Crossing over B. & M.R.R.  
W-39-24

State	Town	County	Type of road or
Windsor	Worthington Road over brooks, three bridges.		
W-41-2	W-41-14		
W-41-22	3,400.00	\$ 1,700.00	\$ 1,700.00

Windsor	1,600.00	-	Savoy Road over Westfield River.
W-41-3	1,000.00	1,000.00	

Respectfully submitted,

G. E. Harkness  
Bridge Engineer

SK:2

C-ENH

10,000.00	5,000.00	5,000.00	
1,250.00	1,250.00	1,250.00	Maintenance
1,200.00	600.00	600.00	Gravel and asphalt placed in place
5,000.00	2,500.00	2,500.00	Repairs
5,000.00	2,500.00	2,500.00	Maintenance
40,000.00	-	-	Maintenance
7,000.00	3,500.00	3,500.00	Maintenance
750.00	750.00	750.00	Maintenance
7,500.00	-	2,500.00	Gravel and asphalt placed in place
7,000.00	3,500.00	3,500.00	Maintenance
1,000.00	1,000.00	1,000.00	Maintenance
6,000.00	3,000.00	3,000.00	Maintenance
500.00	500.00	-	Maintenance
1,400.00	700.00	700.00	Maintenance
100.00	50.00	50.00	Maintenance
400.00	200.00	200.00	Maintenance
4,000.00	2,000.00	2,000.00	Maintenance



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CONSTRUCTION OF TOWN AND COUNTY WAYS  
(Section 34, Chapter 90, General Laws, Ter. Ed.)

During the year the Department has contracted for work to be done in the towns/cities named in the following table, which also shows the type of road or nature of work, the length contracted for, and the allotments or contributions by the State, towns, cities and counties:

Counties and Towns	Contributions		County	Type of road or Nature of work	Length con- tracted for (Feet)
	State	Town			
<u>Barnstable County</u>					
Barnstable	\$ 3,400.00	\$ 1,700.00	\$ 1,700.00	Drainage	1,000
Barnstable	1,600.00	800.00	800.00	Repairs	515
Barnstable	1,000.00	1,000.00	1,000.00	Maintenance	11,332
Brewster	4,500.00	--	4,500.00	Bituminous concrete	1,751
Brewster	750.00	750.00	750.00	Maintenance	8,600
Chatham	10,000.00	5,000.00	5,000.00	Bituminous concrete	6,624
Dennis	1,250.00	1,250.00	1,250.00	Maintenance	16,000
Eastham	1,200.00	600.00	600.00	Gravel and asphalt mixed in place	1,500
Falmouth	5,000.00	2,500.00	2,500.00	Repairs	4,272
Falmouth	5,000.00	2,500.00	2,500.00	Bituminous concrete	1,158
Falmouth	48,000.00	--	--	Bituminous concrete	4,625
Harwich	7,000.00	3,500.00	3,500.00	Bituminous concrete	4,200
Harwich	750.00	750.00	750.00	Maintenance	8,350
Mashpee	7,500.00	--	2,500.00	Gravel treated with calcium	10,000
Orleans	7,000.00	3,500.00	3,500.00	Bituminous concrete	2,956
Sandwich	1,000.00	1,000.00	1,000.00	Maintenance	11,758
Wellfleet	6,000.00	3,000.00	3,000.00	Clay hardening	9,900
<u>Berkshire County</u>					
Adams	1,500.00	500.00	--	Maintenance	8,650
Alford	1,400.00	2,700.00	2,700.00	Gravel and stone retread	1,750
Alford	100.00	650.00	50.00	Repairs	7,713
Alford	1,400.00	400.00	1,400.00	Maintenance	9,000
Becket	4,000.00	2,000.00	2,000.00	Gravel and stone retread	3,075
				Oiling	1,275



Counties and Towns	State	Contributions Town	County	Type of road or Nature of work	Length con- tracted for (Feet)
<b>Perkshire County</b>					
Becket	\$ 500.00	\$ 500.00	\$ 500.00	Maintenance	12,500
Becket	3,200.00	1,600.00	1,600.00	Gravel	1,750
Becket	3,200.00	1,600.00	1,600.00	Oiling	1,000
Becket	300.00	300.00	300.00	Bituminized gravel	1,700
Becket	300.00	300.00	300.00	Maintenance	9,000
Becket	10,000.00	5,000.00	5,000.00	Gravel	4,128
Becket	1,000.00	1,000.00	1,000.00	Bituminous concrete	4,217
Becket	3,200.00	1,600.00	1,600.00	Maintenance	8,217
Becket	3,200.00	1,600.00	1,600.00	Gravel and stone retread	4,390
Becket	3,200.00	1,600.00	1,600.00	Gravel and Bituminized gravel	1,850
Becket	4,000.00	2,000.00	2,000.00	Maintenance	25,000
Becket	4,000.00	2,000.00	2,000.00	Gravel	2,100
Becket	1,000.00	1,000.00	--	Oiling	1,500
Becket	1,000.00	1,000.00	--	Trap rock retread	2,500
Becket	12,750.00	6,375.00	6,375.00	Penolithic pavement	2,610
Becket	12,750.00	6,375.00	6,375.00	Bituminous concrete	5,150
Becket	12,750.00	6,375.00	6,375.00	Reinforced cement concrete	5,350
Becket	16,250.00	2,500.00	6,250.00	Penolithic pavement	5,540
Becket	16,250.00	2,500.00	6,250.00	Bituminous concrete	1,900
Becket	5,931.00	69.00	--	Maintenance	2,200
Becket	5,931.00	69.00	--	Oiling	1,370
Becket	1,000.00	135.00	865.00	Bituminized gravel	1,200
Becket	1,000.00	135.00	865.00	Maintenance	9,000
Becket	780.25	87.75	--	Maintenance	8,000
Becket	780.25	87.75	--	Maintenance	15,300
Becket	6,800.00	3,400.00	3,400.00	Oiling	4,100
Becket	6,800.00	3,400.00	3,400.00	Gravel	2,550
Becket	5,000.00	--	2,500.00	Gravel treated with calcium chloride	2,150
Becket	5,000.00	--	2,500.00	Bridge, channel and	--
Becket	2,250.00	1,125.00	1,125.00	Bridge repairs	--
Becket	2,250.00	1,125.00	1,125.00	Bridge and approaches	--
Becket	10,000.00	5,000.00	5,000.00	Bituminous concrete	3,841
Becket	593.75	--	356.25	Maintenance	17,500
Becket	593.75	--	356.25	Bridge repairs	--
Becket	400.00	400.00	--	Gravel	1,400
Becket	400.00	400.00	--	Maintenance	4,963
Becket	6,000.00	3,000.00	3,000.00	Oiling	1,750
Becket	2,000.00	1,000.00	1,000.00	Oiling	4,100
Becket	2,000.00	1,000.00	1,000.00	Gravel and stone retread	2,400
Becket	1,277.30	--	1,500.00	Flood repairs	--
Becket	5,000.00	2,500.00	2,500.00	Gravel and stone retread	3,740
Becket	5,000.00	2,500.00	2,500.00	Gravel and stone retread	1,450
Becket	300.00	600.00	1,300.00	Gravel and stone retread	508
Becket	300.00	600.00	1,300.00	Bituminized gravel	1,600
Becket	1,500.00	--	1,500.00	Curbing	12,000
Becket	1,500.00	--	1,500.00	Curbing	1,200
Becket	500.00	500.00	1,200.00	Gravel and stone retread	5,860



Counties and Towns	Contributions		County	Type of road or Nature of work	Length con- tracted for (Feet)
	State	Town			
Berkshire County					
Montgomery	\$ 3,000.00	\$ 1,500.00	\$ 1,500.00	Gravel	1,675
Montgomery	300.00	300.00	300.00	Maintenance	6,000
Mount Washington	1,500.00	500.00	1,000.00	Gravel	1,600
New Ashford	800.00	400.00	400.00	Gravel	500
New Ashford	500.00	250.00	250.00	Gravel	400
New Marlborough	5,000.00	2,500.00	2,500.00	Gravel and stone retread	4,390
New Marlborough	1,500.00	1,500.00	--	Maintenance	25,000
New Marlborough	2,000.00	1,000.00	1,000.00	Bituminized gravel and stone retread	4,000
North Adams	10,500.00	5,250.00	5,250.00	Penolithic pavement	2,610
North Adams	4,500.00	2,250.00	2,250.00	Reinforced cement concrete	350
North Adams	5,000.00	--	2,500.00	Bituminous concrete	1,900
North Adams	4,500.00	2,250.00	2,250.00	Gravel	1,050
North Adams	500.00	500.00	--	Maintenance	9,080
Berkshire County					
Pittsfield	1,956.50	43.50	--	Maintenance	15,300
Pittsfield	1,175.25	24.75	--	Maintenance	8,700
Pittsfield	20,000.00	10,000.00	10,000.00	Bridge, channel and embankment	--
Pittsfield	19,000.00	9,500.00	9,500.00	Bridge and approaches	--
Richmond	800.00	800.00	800.00	Maintenance	19,500
Richmond	2,500.00	1,250.00	1,250.00	Gravel	1,400
Sandisfield	6,000.00	3,000.00	3,000.00	Oiling	1,750
Sandisfield				Gravel	3,350
Sandisfield	1,500.00	500.00	1,500.00	Flood repairs	--
Sandisfield				Gravel	1,200
Sheffield	2,000.00	1,000.00	1,000.00	Gravel	1,050
Sheffield	2,000.00	1,000.00	1,000.00	Oiling	1,400
Sheffield				Bituminized gravel	1,600
Sheffield	500.00	500.00	--	Maintenance	12,000
Stockbridge	2,400.00	1,200.00	1,200.00	Gravel and stone retread	1,492
Stockbridge	800.00	800.00	800.00	Maintenance	53,887



Counties and Towns	State	Contributions Town	County	Type of road or Nature of work	Length con- tracted for (Feet)
<u>Berkshire County</u>					
Stockbridge	\$ 600.00	\$ 400.00	\$ 200.00	Maintenance	9,000
Stockbridge	5,000.00	2,500.00	2,500.00	Bituminized gravel	1,400
Waringham	4,000.00	2,000.00	2,000.00	Oiling	9,250
Washington	1,000.00	500.00	500.00	Repairs and oiling	3,400
Washington	1,500.00	--	1,500.00	Repairs and oiling	5,625
West Stockbridge	3,500.00	1,750.00	1,750.00	Bituminized gravel	2,000
West Stockbridge	2,500.00	1,250.00	1,250.00	Oiling	850
West Stockbridge	1,000.00	1,000.00	1,000.00	Bituminized gravel	1,650
Williamstown	5,000.00	2,500.00	2,500.00	Oiling	1,800
Williamstown	500.00	500.00	--	Maintenance	14,480
Windsor	3,000.00	1,500.00	1,500.00	Gravel	3,600
Windsor	500.00	500.00	500.00	Oiling bridge	2,800
Windsor	1,000.00	--	500.00	Maintenance	8,964
Windsor	2,500.00	1,250.00	1,250.00	Gravel	1,600
Bristol County	1,000.00	1,000.00	1,000.00	Maintenance	4,000
Cushnet	5,000.00	2,500.00	2,500.00	Flood repairs	700
Cushnet	1,500.00	1,500.00	500.00	Bituminized gravel	2,156
Attleboro	8,000.00	5,500.00	2,500.00	Maintenance	18,688
Berkley	1,000.00	1,000.00	1,000.00	Bituminous concrete	2,150
Dartmouth	5,000.00	2,500.00	2,500.00	Maintenance	20,819
Dartmouth	5,000.00	2,500.00	2,500.00	Bituminous concrete	1,210
Fairhaven	1,000.00	1,000.00	1,000.00	Bituminous concrete	47,936
Freetown	1,000.00	1,000.00	1,000.00	Bituminous concrete	2,275
North Attleborough	5,000.00	2,500.00	2,500.00	Bituminized gravel	13,000
Norton	3,000.00	1,500.00	1,500.00	Maintenance	28,195
Norton	1,250.00	1,250.00	250.00	Bituminous concrete	62,527
Raynham	1,500.00	1,500.00	500.00	Bituminous concrete	1,550
Shohoboth	3,800.00	3,800.00	800.00	Bituminized gravel	1,750



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Counties and Towns	State	Contributions Town	County	Type of road or Nature of work	Length con- tracted for (Feet)
<u>Pristol County</u>	\$20,000.00	\$10,000.00	\$10,000.00	Bridge and approaches	--
Rehoboth	\$ 5,000.00	\$ 2,500.00	\$ 2,500.00	Bituminized gravel	1,400
Seekonk	5,500.00	2,750.00	2,750.00	Bituminous concrete	1,750
Taunton	10,000.00	5,000.00	5,000.00	Bituminous concrete	1,808
Westport	20 500.00	10 500.00	10 500.00	Maintenance concrete	61,924
	1,150.00	1,150.00	--	Repairs	4,312
<u>County of Dukes County</u>					
	1,500.00	1,500.00	--	Maintenance	30,924
Oak Bluffs	2,500.00	1,250.00	1,250.00	Maintenance	11,700
	8,000.00	4,000.00	4,000.00	Bituminous concrete	2,215
Oak Bluffs )	500.00	1,--.00	500.00	Painting bridge	3,--0
Tisbury )					
West Tisbury	12,000.00	6,000.00	6,000.00	Bituminous concrete	3,273
	1,000.00	750.00	750.00	Maintenance	8,100
	12,000.00	6,000.00	6,000.00	Bituminous concrete	2,188
<u>Essex County</u>	6,000.00	3,000.00	3,000.00	Broken stone and asphalt mixed in place	2,500
Amesbury	2,500.00	1,250.00	1,250.00	Bituminized gravel	2,156
Amesbury	1,000.00	1,000.00	5,--.00	Maintenance concrete	18,688
Andover	1,750.00	10 500.00	10 750.00	Reinforced cement concrete (widening)	452
Andover	1,000.00	1,000.00	--	Maintenance	53,551
Beverly	12,500.00	6,250.00	6,250.00	Bituminous concrete	2,900
Beverly	5,200.00	2,600.00	2,600.00	Bituminous concrete (widening)	3,700
Boxford	4,000.00	1,000.00	3,000.00	Broken stone and tar mixed in place	5,285
Boxford	1,000.00	1,000.00	--	Maintenance	15,211
Canvers	7,200.00	1,800.00	1,800.00	Bituminous macadam	19 600
				Bituminous concrete	700
Essex	4,000.00	2,000.00	2,000.00	Broken stone and asphalt mixed in place	2,182
Essex	1,000.00	1,000.00	7,500.00	Maintenance concrete	21,331
Georgetown	3,000.00	1,500.00	1,500.00	Grading	18 800
Georgetown	1,000.00	1,000.00	2,--.00	Bridge extension	--
				Maintenance	13,200
Gloucester	1,570.57	1,570.57	2,000.00	Broken stone surfacing	1,700
Gloucester	3,429.43	3,429.43	--	Bituminous macadam	1,700



Counties and Towns	State	Contributions Town	County	Type of road or Nature of work	Length con- tracted for (Feet)
Essex County					
Lowchester	\$20,000.00	\$10,000.00	\$10,000.00	Bridge and approaches	--
Lowland	500.00	500.00	--	Maintenance	8,776
Hamilton	8,000.00	4,000.00	4,000.00	Bituminous concrete	3,281
Hamilton	1,000.00	1,000.00	--	Maintenance	16,793
Haverhill	20,000.00	10,000.00	10,000.00	Bituminous concrete	2,400
Haverhill	1,150.00	1,150.00	--	Repairs	4,312
Haverhill	1,500.00	1,500.00	--	Maintenance	30,924
Ipswich	8,000.00	4,000.00	4,000.00	Bituminous concrete	2,215
Ipswich	3,200.00	1,600.00	1,600.00	Bituminous concrete	3,450
Lawrence	12,000.00	6,000.00	6,000.00	Bituminous concrete	3,273
Lynn	12,000.00	6,000.00	6,000.00	Bituminous concrete	2,188
Lynnfield	6,000.00	3,000.00	3,000.00	Broken stone and asphalt mixed in place	2,500
Lynnfield	500.00	500.00	--	Maintenance	26,256
Marblehead	10,000.00	5,000.00	5,000.00	Bituminous concrete	2,015
Marblehead County					
Merrimac	1,500.00	1,500.00	--	Maintenance	13,100
Methuen	7,000.00	3,500.00	3,500.00	Bituminous concrete	1,245
Methuen	1,000.00	1,000.00	--	Maintenance	5,530
Middleton	12,000.00	2,000.00	4,000.00	Bituminous concrete	2,746
Middleton	1,000.00	1,000.00	--	Maintenance	15,900
Newbury	1,500.00	1,500.00	--	Maintenance	19,620
North Andover	7,000.00	3,500.00	3,500.00	Broken stone and asphalt mixed in place	3,450
Peabody	15,000.00	7,500.00	7,500.00	Bituminous concrete	1,736
Peabody	3,750.00	3,750.00	--	Maintenance	18,390
Rockport	4,000.00	2,000.00	2,000.00	Broken stone and asphalt mixed in place	1,000
Rockport	4,000.00	2,000.00	2,000.00	Broken stone and asphalt mixed in place	1,290
Rockport	500.00	500.00	--	Maintenance	8,800



Counties and Towns	State	Contributions Town	County	Type of road or Nature of work	Length contracted for (Feet)
<u>Essex County</u>					
Ashfield	\$13,000.00	\$11,000.00	\$ 1,000.00	Bituminous macadam	7,133
Rowley	3,000.00	1,500.00	1,500.00	Bituminized gravel	1,750
Ashfield	4,099.02	3,104.88	496.69	Bituminous macadam	766
Rowley	1,000.00	1,000.00	--	Maintenance	25,900
Ashfield	4,150.98	3,145.12	503.31	Gravel and tar mixed in place	9,000
Salem	8,500.00	4,250.00	4,250.00	Bituminous concrete	3,331
Ashfield	1,000.00	1,000.00	--	Maintenance	20,157
Salem	1,500.00	750.00	750.00	Bituminous concrete	1,350
Rowley	4,000.00	1,000.00	1,000.00	Flood repairs	--
Saugus	2,500.00	1,250.00	1,250.00	Penolithic pavement (widening)	6,277
Ashfield	2,000.00	1,000.00	1,000.00	Flood repairs	--
Saugus	5,000.00	3,750.00	1,250.00	Penolithic pavement	1,750
Swampscott	2,000.00	1,000.00	1,000.00	Gravel and tar mixed in place	1,450
Saugus	1,500.00	1,500.00	--	Maintenance	19,800
Swampscott	500.00	500.00	--	Maintenance	9,240
Swampscott	3,000.00	1,500.00	1,500.00	Bituminous macadam	340
Ashfield	2,000.00	1,000.00	1,000.00	Grading	1,250
Topsfield	6,500.00	1,000.00	2,500.00	Bituminous concrete	1,708
Ashfield	557.75	278.87	278.87	Gravel	250
Topsfield	1,000.00	1,000.00	--	Maintenance	17,600
Ashfield	1,442.25	721.13	721.13	Flood repairs	--
Wenham	13,000.00	2,000.00	5,000.00	Bituminous concrete	3,848
Wenham	10,500.00	9,500.00	1,000.00	Bituminous macadam	2,731
Wenham	700.00	700.00	--	Maintenance	1,400
New Salem	2,000.00	1,500.00	500.00	Gravel	1,050
West Newbury	3,500.00	1,750.00	1,750.00	Broken stone and asphalt mixed in place	3,200
New Salem	1,000.00	500.00	500.00	Flood repairs	--
<u>Franklin County</u>	2,000.00	1,000.00	1,000.00	Bridge and approaches	--
Ashfield	1,000.00	2,500.00	2,500.00	Gravel and tar mixed in place	2,700
Ashfield	1,560.00	2,240.00	--	Maintenance	15,840
Ashfield	1,000.00	1,500.00	1,500.00	Bituminized gravel	2,700
Barnardston	2,000.00	1,000.00	1,000.00	Gravel and approaches	1,115
Buckland	4,000.00	3,000.00	1,000.00	Flood repairs	1,--0
Charlemont	5,000.00	--	--	Temporary bridges	5,--9
Charlemont	2,000.00	1,000.00	1,000.00	Flood repairs	--0
Colrain	2,000.00	1,000.00	1,000.00	Grading	1,800
Conway	3,000.00	2,000.00	1,000.00	Grading	1,100
Erving	2,000.00	1,000.00	1,000.00	Bituminized gravel	1,350
Gill	1,400.00	1,700.00	700.00	Oiling	1,400
Gill	1,400.00	1,700.00	700.00	Gravel and tar mixed in place	25,750
Gill	2,897.50	1,502.50	1,000.00	Maintenance	7,920



County and Town	State	Contributions Town	County	Type of road or Nature of work	Length contracted for (Feet)
Franklin County	\$10,000.00	\$ 5,000.00	\$ 5,000.00	Bituminous macadam	4,720
Greenfield	\$13,000.00	\$11,000.00	\$ 1,000.00	Bituminous macadam	7,133
Greenfield	2,500.00	1,250.00	1,250.00	Maintenance	25,500
Greenfield	4,099.02	3,104.88	496.69	Bituminous macadam	766
Greenfield	5,000.00	2,000.00	3,000.00	Gravel	1,900
Greenfield	4,150.98	3,145.12	503.31	Gravel and tar mixed in place	9,000
Greenfield	4,000.00	2,000.00	2,000.00	Gravel and tar mixed in place	2,100
Greenfield	1,000.00	1,000.00	--	Maintenance	20,157
Greenfield	1,000.00	--	500.00	Flood repairs	400
Hawley	4,000.00	1,000.00	1,000.00	Flood repairs	--
Hawley	500.00	500.00	500.00	Maintenance	38,218
Heath	2,000.00	1,000.00	1,000.00	Flood repairs	--
Heath	4,000.00	1,000.00	2,000.00	Gravel and bituminized gravel	2,467
Leverett	2,000.00	1,000.00	1,000.00	Gravel and tar mixed in place	1,450
Leverett	4,000.00	1,000.00	2,000.00	Repairs and oiling	3,800
Leverett	500.00	500.00	--	Maintenance	9,240
Leverett	600.00	600.00	600.00	Maintenance	14,800
Leyden	2,000.00	1,000.00	1,000.00	Grading	1,250
Leyden	8,000.00	4,000.00	4,000.00	Penolithic pavement	1,846
Monroe	557.75	278.87	278.87	Gravel	250
Monroe	7,000.00	3,500.00	3,500.00	Bituminous concrete	1,278
Monroe	1,442.25	721.13	721.13	Flood repairs	--
Monroe	8,000.00	4,000.00	4,000.00	Bituminous macadam	2,820
Montague	10,500.00	9,500.00	1,000.00	Bituminous macadam	2,731
Montague	1,500.00	600.00	600.00	Bituminous macadam	2,300
New Salem	2,000.00	1,500.00	500.00	Gravel	1,050
New Salem	400.00	400.00	400.00	Maintenance	8,743
New Salem	1,000.00	500.00	500.00	Flood repairs	--
Northfield	6,000.00	3,000.00	3,000.00	Bituminous macadam	2,350
Northfield	2,000.00	1,000.00	1,000.00	Bridge and approaches	--
Northfield	1,000.00	1,000.00	1,000.00	Maintenance	34,320
Orange	4,750.00	2,750.00	2,000.00	Bituminized gravel	5,400
Orange	3,000.00	1,200.00	1,800.00	Gravel and tar mixed in place	2,200
Orange	2,000.00	2,000.00	--	Maintenance	35,800
Orange	1,500.00	500.00	1,000.00	Bituminous macadam (widening) and oiling	2,500
Rowe	3,000.00	1,500.00	1,000.00	Flood repairs	--
Rowe	250.00	250.00	250.00	Maintenance	6,018
Shelburne	3,000.00	2,000.00	1,000.00	Bridge and approaches	--
Shelburne	4,000.00	1,000.00	3,000.00	Gravel and tar mixed in place and flood repairs	1,500
Shutesbury	2,000.00	1,000.00	1,000.00	Gravel	25,375
Shutesbury	750.00	750.00	750.00	Maintenance	5,259
Sunderland	700.00	--	--	Oiling	2,070
Sunderland	10,000.00	5,000.00	5,000.00	Bituminous macadam	900
Warwick	2,000.00	1,000.00	1,000.00	Gravel	5,410
Warwick	10,000.00	5,000.00	5,000.00	Bituminous macadam	18,480
Warwick	2,275.00	124.50	--	Maintenance	2,700
Warwick	5,000.00	2,500.00	2,500.00	Flood repairs	1,350
Warwick	1,000.00	1,000.00	--	Maintenance	25,872
Wendell	5,000.00	2,500.00	2,500.00	Bituminous macadam	14,893
Wendell	4,000.00	3,000.00	1,000.00	Bridge and approaches	1,000
Wendell	250.00	250.00	250.00	Guard rail	--
Wendell	1,250.00	1,250.00	--	Maintenance	25,872
Wendell	500.00	500.00	500.00	Maintenance	14,893
Whately	2,000.00	1,000.00	1,000.00	Bituminous macadam	1,000
Whately	5,000.00	1,000.00	2,500.00	Gravel and stone retread	4,500
Whately	2,500.00	1,250.00	1,250.00	Gravel	1,300



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Counties and Towns	State	Contributions Town	County	Type of road or Nature of work	Length con- tracted for (Feet)
<u>Hampden County</u>					
Agawam	\$10,000.00	\$ 5,000.00	\$ 5,000.00	Bituminous macadam	4,920
Agawam	2,500.00	1,250.00	1,250.00	Maintenance	25,500
Andover	5,000.00	2,000.00	3,000.00	Gravel and approaches	1,900
Brimfield	4,000.00	2,000.00	2,000.00	Gravel and tar mixed in place	2,100
Brimfield	1,000.00	--	500.00	Flood repairs	400
Brimfield	500.00	500.00	500.00	Maintenance	38,218
Chester	4,000.00	1,000.00	2,000.00	Gravel and bituminized gravel	2,467
Chester	4,000.00	1,000.00	2,000.00	Repairs and oiling	3,000
Chester	600.00	600.00	600.00	Gravel	2,050
Chester				Maintenance	14,800
Chicopee	8,000.00	4,000.00	4,000.00	Penolithic pavement	1,846
Chicopee	7,000.00	3,500.00	3,500.00	Bituminous concrete	1,278
East Longmeadow	8,000.00	4,000.00	4,000.00	Bituminous macadam	2,820
East Longmeadow	1,600.00	800.00	800.00	Gravel and tar mixed in place and flood repairs	2,300
East Longmeadow	400.00	400.00	400.00	Maintenance	8,723
Granville	6,000.00	3,000.00	3,000.00	Bituminous macadam	2,350
Granville	1,000.00	1,000.00	1,000.00	Bituminous concrete	34,320
Hampden	3,000.00	1,200.00	1,800.00	Gravel and tar mixed in place	2,200
Hampden	1,500.00	500.00	1,000.00	Bituminous macadam (widening) and oiling	2,500
Hampden	250.00	250.00	250.00	Maintenance	6,018
Holland	4,600.00	1,000.00	3,600.00	Gravel and tar mixed in place and flood repairs	--
Holland	750.00	750.00	750.00	Maintenance	25,375
Longmeadow	10,000.00	5,000.00	5,000.00	Bituminous macadam	2,078
Ludlow	10,000.00	5,000.00	5,000.00	Bituminous macadam	5,410
Monson	5,000.00	2,500.00	2,500.00	Flood repairs	--
Monson	5,000.00	2,500.00	2,500.00	Bituminous macadam	1,350
Monson	250.00	250.00	250.00	Guard rail	400
Monson	500.00	500.00	500.00	Maintenance	14,893
Montgomery	5,000.00	1,000.00	2,500.00	Gravel and stone retread	4,580



Counties and Towns	State	Contributions Town	County	Type of road or Nature of work	Length contracted for (feet)
<u>Hampden County</u>					
Amherst	\$ 1,000.00	\$ 500.00	\$ 500.00	Bituminized gravel	1,000
Montgomery	\$ 400.00	\$ 400.00	\$ 400.00	Maintenance	5,650
Amherst	250.00	250.00	250.00	Maintenance	2,300
Palmer	30,000.00	15,000.00	15,000.00	Bridge and approaches	--
Amherst	312.50	37.50	--	Maintenance	3,168
Palmer	1,000.00	1,000.00	1,000.00	Maintenance	55,515
Amherst	20,000.00	11,000.00	9,000.00	Bituminous macadam	9,454
Palmer	10,000.00	5,000.00	5,000.00	Bituminous macadam	2,150
Amherst	2,000.00	1,000.00	1,000.00	Gravel	1,000
Russell	1,500.00	750.00	750.00	Stone retread	5,550
Amherst	500.00	500.00	500.00	Maintenance	1,800
Russell	200.00	200.00	200.00	Maintenance	3,625
Amherst	428.00	72.00	--	Maintenance	4,752
Southwick	904.00	296.00	--	Maintenance	7,920
Amherst	4,600.00	2,300.00	2,300.00	Bituminous macadam	2,640
Southwick	6,000.00	2,400.00	3,600.00	Bituminous macadam	3,177
Amherst	400.00	200.00	200.00	Bituminized gravel	1,800
Springfield	30,000.00	15,000.00	15,000.00	Bituminous concrete	5,842
Amherst	3,000.00	1,500.00	1,500.00	Bituminized gravel	3,050
Tolland	5,000.00	2,000.00	3,000.00	Bituminized gravel	2,600
Amherst	500.00	500.00	500.00	Maintenance	21,120
Tolland	300.00	300.00	300.00	Maintenance	9,150
Amherst	500.00	500.00	500.00	Maintenance	15,048
Wales	2,000.00	1,000.00	1,000.00	Gravel and tar mixed in place and flood repairs	--
Amherst	4,000.00	2,000.00	2,000.00	Gravel and oiling	3,535
Wales	300.00	300.00	300.00	Maintenance	14,700
Amherst	2,000.00	1,000.00	1,000.00	Gravel	675
West Springfield	8,000.00	4,000.00	4,000.00	Bituminous macadam and oiling	4,259
Amherst	1,000.00	500.00	500.00	Gravel	850
West Springfield	7,500.00	3,750.00	3,750.00	Bituminous concrete	1,385
Amherst	2,991.75	8.25	--	Maintenance	2,980
Westfield	6,000.00	3,000.00	3,000.00	Stone retread and bituminous macadam	6,655
Amherst	500.00	500.00	500.00	Maintenance	16,650
Westfield	7,000.00	3,500.00	3,500.00	Bituminous macadam	6,000
Amherst WPA	10,000.00	5,000.00	5,000.00	Bituminous macadam	3,866
Westfield \$102,000	50,000.00	65,000.00	10,000.00	Bridge and approaches	--
Amherst	5,800.00	3,400.00	3,400.00	Bituminous concrete	2,175
Wilbraham	850.00	425.00	425.00	Bituminous macadam	1,396
Amherst	1,200.00	600.00	600.00	Repairs	700
Wilbraham	350.00	350.00	350.00	Maintenance	36,960
Amherst	1,000.00	1,000.00	1,000.00	Maintenance	35,524
<u>Hampshire County</u>					
Amherst	1,000.00	500.00	500.00	Repairs	15,576
Belchertown	11,250.00	6,750.00	4,500.00	Bituminous macadam	3,500
Belchertown	7,500.00	3,750.00	3,750.00	Bituminous macadam	6,450
Chesterfield	6,500.00	1,000.00	2,500.00	Crushed stone and tar mixed in place	1,172
Chesterfield	1,912.50	187.50	--	Maintenance	13,200
Chesterfield	8,250.00	4,250.00	4,250.00	Maintenance concrete and gravel	14,000
Cummington	3,000.00	1,500.00	1,500.00	Gravel	1,100



County	Town	State	Contributions Town	County	Type of road or Nature of work	Length con- tracted for (Feet)
<b>Hampshire County</b>						
Cummington		\$ 1,000.00	\$ 500.00	\$ 500.00	Bituminized gravel	1,000
Cummington		250.00	250.00	250.00	Maintenance	2,300
Cummington		312.50	37.50	--	Maintenance	3,168
Easthampton		20,000.00	11,000.00	9,000.00	Bituminous macadam	9,454
Goshen		2,000.00	1,000.00	1,000.00	Gravel	1,000
Goshen		500.00	500.00	500.00	Maintenance	1,800
Goshen		428.00	72.00	--	Maintenance	4,752
Granby		4,600.00	2,300.00	2,300.00	Bituminous macadam	2,640
Granby		400.00	200.00	200.00	Bituminized gravel	1,800
Hadley		3,000.00	1,500.00	1,500.00	Bituminized gravel	3,050
Hadley		500.00	500.00	500.00	Maintenance	21,120
Hatfield		500.00	500.00	500.00	Maintenance	15,048
<b>Middlesex County</b>						
Amherst		4,000.00	2,000.00	2,000.00	Gravel and oiling	3,535
Middlefield		2,000.00	1,000.00	1,000.00	Gravel	675
Middlefield		1,000.00	500.00	500.00	Gravel (widening) and oiling	1,750
Middlefield		2,991.75	8.25	--	Gravel	850
Middlefield		1,000.00	500.00	500.00	Bituminized gravel	2,980
Middlefield		500.00	500.00	500.00	Maintenance	16,650
Northampton		10,000.00	5,000.00	5,000.00	Bituminous macadam	3,866
Northampton		6,800.00	3,400.00	3,400.00	Bituminous concrete	2,175
Northampton		1,200.00	600.00	600.00	Repairs	700
Northampton		1,000.00	1,000.00	1,000.00	Maintenance	35,524
Pelham		1,000.00	500.00	500.00	Repairs	15,576
Plainfield		9,750.00	1,500.00	3,750.00	Bituminized gravel	2,950
Plainfield		762.50	37.50	--	Maintenance	7,920
Plainfield		500.00	500.00	500.00	Maintenance	11,400
Plainfield		1,429.50	70.50	--	Maintenance	11,616
South Hadley		8,000.00	4,000.00	4,000.00	Bituminous concrete	5,627



<u>Countries and Towns</u>	<u>State</u>	<u>Contributions</u> <u>Town</u>	<u>County</u>	<u>Type of road or</u> <u>Nature of work</u>	<u>Length con-</u> <u>tracted for</u> <u>(Feet)</u>
<u>Hampshire County</u>					
South Hadley	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	Maintenance	14,775
Southampton	1,000.00	500.00	500.00	Stone retread	875
Ware	5,000.00	2,500.00	2,500.00	Bituminous macadam	1,500
Westhampton	800.00	800.00	800.00	Maintenance	25,344
Westhampton	2,000.00	1,000.00	1,000.00	Gravel	1,820
Williamsburg	2,500.00	1,250.00	1,250.00	Gravel and tar mixed in place	3,750
Williamsburg	535.00	165.00	--	Maintenance	5,280
Williamsburg	250.00	250.00	250.00	Maintenance	5,150
Worthington	2,000.00	1,000.00	1,000.00	Gravel	1,750
Worthington	4,800.00	2,000.00	2,000.00	Bridge and approaches	--
Worthington	400.00	400.00	400.00	Maintenance	3,725
<u>Middlesex County</u>					
Acton	6,300.00	3,150.00	3,150.00	Bituminous concrete	2,060
Acton	2,000.00	2,000.00	2,000.00	Maintenance	102,432
Ashby	1,000.00	500.00	1,000.00	Bituminized gravel	938
Ashby	1,000.00	500.00	1,000.00	Bituminized gravel	800
Ashby	500.00	500.00	500.00	Maintenance	21,120
Ashland	2,000.00	1,000.00	1,000.00	Bituminized gravel	1,400
Ashland	1,500.00	1,500.00	1,500.00	Maintenance	33,792
Ayer	5,230.00	2,615.00	2,615.00	Bituminous concrete	2,000
Ayer	2,770.00	1,385.00	1,385.00	Bituminous macadam (widening)	1,100
Ayer	1,500.00	1,500.00	1,500.00	Maintenance	44,827
Bedford	4,000.00	2,000.00	2,000.00	Bituminous concrete	1,535
Bedford	1,500.00	1,500.00	1,500.00	Maintenance	55,440
Belmont	8,000.00	4,000.00	4,000.00	Bituminous concrete	1,355
Billerica	5,250.00	2,625.00	2,625.00	Bituminous macadam and bituminized gravel	2,200



Counties and Towns	State	Contributions Town	County	Type of road or Nature of work	Length con- tracted for (Feet)
Middlesex County					
Billerica	\$ 6,750.00	\$ 3,375.00	\$ 3,375.00	Bituminous concrete	1,660
Billerica	3,000.00	3,000.00	3,000.00	Maintenance concrete	99,422
Boxborough	600.00	600.00	600.00	Maintenance	44,985
Burlington	4,000.00	2,000.00	2,000.00	Bituminized gravel	3,500
Burlington	4,000.00	2,000.00	2,000.00	Bituminous macadam (widening)	3,350
Burlington	3,000.00	3,000.00	3,000.00	Maintenance gravel	84,480
Cambridge	30,000.00	15,000.00	15,000.00	Bituminous concrete	6,800
Carlisle	1,000.00	1,000.00	1,000.00	Maintenance gravel	64,944
Chelmsford	7,000.00	3,500.00	3,500.00	Bituminous concrete	1,875
Chelmsford	2,000.00	1,000.00	1,000.00	Repairs concrete	935
Chelmsford	3,000.00	3,000.00	3,000.00	Maintenance concrete	95,462
Concord	9,000.00	4,500.00	4,500.00	Bituminous concrete	2,055
Concord	1,500.00	1,500.00	1,500.00	Maintenance macadam	92,083
Dracut	9,000.00	3,000.00	6,000.00	Bituminous concrete	2,854
Dracut	3,000.00	3,000.00	3,000.00	Maintenance concrete	76,032
Dunstable	2,000.00	1,000.00	1,000.00	Bituminized gravel	2,100
Dunstable	1,000.00	1,000.00	1,000.00	Maintenance concrete	52,272
Everett	35,000.00	23,333.34	11,666.66	Bituminous concrete	6,708
Framingham	7,000.00	3,500.00	3,500.00	Bituminous concrete	2,000
Framingham	12,000.00	10,000.00	6,000.00	Bituminous concrete	2,752
Framingham	2,000.00	2,000.00	2,000.00	Maintenance gravel	91,291
Groton	6,000.00	3,000.00	3,000.00	Bituminized gravel	1,755
Groton	2,000.00	2,000.00	2,000.00	Maintenance concrete	61,512
Holliston	6,000.00	1,250.00	4,750.00	Bituminous concrete	1,658
Holliston	1,500.00	1,500.00	1,500.00	Maintenance	53,328
Hopkinton	2,000.00	2,000.00	2,000.00	Maintenance gravel	70,224
Framingham	3,000.00	3,000.00	3,000.00	Maintenance	83,424

715-  
714-

Counties and Towns	State	Contributions Town	County	Type of road or Nature of work	Length contracted for (Feet)
Middlesex County					
Hudson	\$ 9,000.00	\$ 7,000.00	\$ 5,000.00	Bituminous concrete	22,91,900
Hudson	4,500.00	3,500.00	2,500.00	Bituminous concrete	1,81,800
Hudson	2,000.00	2,000.00	2,000.00	Maintenance	1,52,694
Lexington	6,000.00	5,000.00	4,000.00	Bituminous concrete	74,42,550
Lexington	1,000.00	3,000.00	1,000.00	Maintenance	5,40,656
Lincoln	3,000.00	1,500.00	1,500.00	Bituminized gravel	55,42,100
Lincoln	1,000.00	1,000.00	1,000.00	Maintenance	2,39,072
Littleton	2,400.00	1,200.00	1,200.00	Bituminized gravel	1,21,400
Littleton	1,500.00	1,500.00	1,500.00	Maintenance	70,065
Lowell	18,000.00	12,000.00	6,000.00	Bituminous concrete	1,44,076
Malden	3,750.00	1,875.00	1,875.00	Bituminous concrete	35,581,875
Malden	12,000.00	15,000.00	9,000.00	Bituminous concrete	41,15,011
Marlborough	10,200.00	5,100.00	5,100.00	Bituminous macadam	4,32,009
Marlborough	1,250.00	625.00	625.00	Bituminous macadam	85,008,280
Maynard	17,000.00	8,500.00	8,500.00	Bituminous concrete	3,65,720
Maynard	1,000.00	1,000.00	1,000.00	Maintenance	28,987
Medford	1,200.00	600.00	600.00	Bituminous concrete	60,720,200
Medford	16,500.00	8,250.00	8,250.00	Bituminous concrete	1,72,557
Natick	2,500.00	1,250.00	1,250.00	Bituminous concrete	1,850,640
Natick	15,000.00	7,500.00	7,500.00	Bituminous concrete	45,05,183
Natick	1,500.00	1,500.00	1,500.00	Maintenance	1,55,545
Newton	10,000.00	5,000.00	5,000.00	Bituminous concrete	2,165
Newton	18,000.00	12,000.00	6,000.00	Bituminous concrete	5,900
North Reading	6,000.00	3,000.00	3,000.00	Bituminous concrete	2,254
North Reading	1,500.00	1,500.00	1,500.00	Maintenance	52,800
Pepperell	2,000.00	1,000.00	1,000.00	Bituminized gravel	1,200
Pepperell	3,000.00	3,000.00	3,000.00	Maintenance	83,424



Counties and Towns	State	Contributions Town	County	Type of road or Nature of work	Length con- tracted for (Feet)
Middlesex County					
Reading	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	Maintenance	22,915
Reading	9,000.00	4,500.00	4,500.00	Bituminous concrete	1,872
Reading	9,000.00	4,500.00	4,500.00	Penolithic pavement	1,700
Sherborn	2,000.00	2,000.00	2,000.00	Maintenance	74,448
Shirley	6,000.00	3,000.00	3,000.00	Bituminized gravel	5,325
Shirley	2,000.00	2,000.00	2,000.00	Maintenance	55,440
Somerville	14,680.00	7,340.00	7,340.00	Bituminous concrete	2,501
Somerville	7,820.00	3,910.00	3,910.00	Bituminous concrete	1,246
Somerville	7,500.00	3,750.00	3,750.00	Bituminous concrete	613
Stoneham	6,100.00	3,050.00	3,050.00	Penolithic pavement	1,471
Stoneham	1,000.00	1,000.00	1,000.00	Maintenance	35,587
Stow	1,500.00	1,500.00	1,500.00	Maintenance	41,184
Sudbury	6,000.00	3,000.00	3,000.00	Bituminized gravel	4,385
Sudbury	1,000.00	1,000.00	1,000.00	Maintenance	85,008
Tewksbury	5,000.00	2,500.00	2,500.00	Bituminized gravel	3,600
Tewksbury	1,750.00	875.00	875.00	Bituminized gravel	950
Tewksbury	2,500.00	2,500.00	2,500.00	Maintenance	60,720
Townsend	2,000.00	1,000.00	1,000.00	Bituminized gravel	1,705
Townsend	2,000.00	1,000.00	1,000.00	Bituminized gravel	1,850
Townsend	2,000.00	2,000.00	2,000.00	Maintenance	45,091
Tyngsborough	2,400.00	1,000.00	1,400.00	Bituminized gravel	1,150
				Oiling	415
Tyngsborough	800.00	400.00	400.00	Bituminized gravel	800
Tyngsborough	2,000.00	2,000.00	2,000.00	Maintenance	87,912
Wakefield	3,500.00	1,750.00	1,750.00	Bituminous concrete	1,350
Wakefield	6,000.00	3,000.00	3,000.00	Bituminous concrete	1,510
Wakefield	300.00	150.00	150.00	Penolithic pavement	62
Wakefield	1,000.00	1,000.00	1,000.00	Maintenance	37,224

Counties and towns	State	Contributions Town	County	Type of road or Nature of work	Length con- tracted for (Feet)
<u>Middlesex County</u>					
Waltham	\$10,250.00	\$5,125.00	\$ 5,125.00	Bituminous concrete Bituminous macadam	1,566 585
Waltham	5,250.00	2,625.00	2,625.00	Bituminous concrete	1,810
Watertown	20,000.00	10,000.00	10,000.00	Bituminous concrete	3,260
Wayland	4,750.00	3,150.00	3,150.00	Bituminous concrete	3,500
Wayland	2,000.00	2,000.00	2,000.00	Maintenance	56,760
Westford	2,000.00	1,000.00	1,000.00	Gravel(widening) and Oiling	2,700
Westford	3,000.00	3,000.00	3,000.00	Maintenance	143,088
Wilmington	6,000.00	3,000.00	3,000.00	Bituminized gravel	3,190
Wilmington	1,000.00	1,000.00	1,000.00	Maintenance	42,768
Winchester	17,500.00	11,666.67	5,833.33	Bituminous concrete	3,650
Woburn	2,500.00	1,250.00	1,250.00	Bituminous concrete	850
Woburn	25,000.00	12,500.00	12,500.00	Bituminous concrete	5,200
Woburn	4,250.00	2,125.00	2,125.00	Bituminous concrete	1,650
<u>Nantucket County</u>					
Nantucket	1,500.00	1,500.00	--	Maintenance	10,450
<u>Norfolk County</u>					
Avon	1,000.00	1,000.00	1,000.00	Maintenance	27,561
Bellingham	1,000.00	1,000.00	--	Repairs	--
Bellingham	1,000.00	1,000.00	1,000.00	Maintenance	62,515
Braintree	3,000.00	3,000.00	--	Grading	2,766
Brockline	40,000.00	40,000.00	--	Bituminous concrete Bituminous macadam	3,203 1,650
Canton	1,000.00	1,000.00	1,000.00	Maintenance	38,174
Dedham	1,000.00	2,000.00	1,000.00	Maintenance	24,130
Dover	300.00	300.00	300.00	Maintenance	3,513



Counties and towns	State	Contributions Town	County	Type of road or Nature of work	Length con- tracted for (Feet)
<b>Norfolk County</b>					
Foxborough	\$ 1,500.00	\$ 1,500.00	\$ 1,500.00	Maintenance gravel	42,346
Franklin	2,500.00	2,500.00	--	Bituminous macadam	1,037
Franklin	1,500.00	1,500.00	1,500.00	Maintenance	101,802
Holbrook	7,500.00	7,500.00	--	Bituminous concrete	1,467
Holbrook	500.00	500.00	500.00	Maintenance	29,462
Medfield	1,000.00	1,000.00	1,000.00	Maintenance	34,531
Medway	2,500.00	2,500.00	--	Bituminized gravel	1,980
Medway	1,500.00	1,500.00	1,500.00	Maintenance	64,046
Millis	1,000.00	1,000.00	1,000.00	Maintenance	66,739
Milton	7,500.00	7,500.00	--	Bituminous concrete	1,519
Needham	1,000.00	1,000.00	1,000.00	Maintenance asphalt	42,768
Norfolk	1,500.00	1,500.00	1,500.00	Maintenance	63,571
Norwood	1,000.00	1,000.00	1,000.00	Maintenance	2,640
Plainville	500.00	500.00	500.00	Maintenance	12,672
Quincy	14,300.00	14,300.00	--	Bituminous concrete	3,000
Quincy	13,200.00	13,200.00	--	Bituminous concrete	2,225
Randolph	1,000.00	1,000.00	1,000.00	Maintenance	27,556
Sharon	1,000.00	1,000.00	1,000.00	Maintenance	46,464
Stoughton	5,000.00	5,000.00	--	Crushed stone and tar mixed in place	3,400
Stoughton	1,000.00	1,000.00	1,000.00	Maintenance tar mixed	29,146
Walpole	5,950.00	5,950.00	--	Bituminous concrete	1,814
Walpole	1,000.00	1,000.00	1,000.00	Maintenance asphalt	55,704
Wellesley	7,000.00	7,000.00	--	Bituminous concrete	1,650
Westwood	7,500.00	7,500.00	--	Bituminous concrete	2,450
Westwood	1,500.00	1,500.00	1,500.00	Maintenance macadam	21,331
Weymouth	16,000.00	16,000.00	--	Bituminous concrete	2,655

Counties and towns	State	Contributions Town	County	Type of road or Nature of work	Length ex- tracted (Feet)
<u>Norfolk County</u>					
Wrentham	\$ 3,000.00	\$ 3,000.00	--	Bituminized gravel	1,908
Wrentham	1,000.00	1,000.00	1,000.00	Maintenance	26,717
<u>Plymouth County</u>					
Abington	8,500.00	4,250.00	4,250.00	Bituminous concrete	2,450
Bridgewater	4,000.00	2,000.00	2,000.00	Bridge and approaches (in conjunction with the Town of Halifax)	--
Brockton	30,600.00	30,600.00	--	Bituminous concrete	7,025
Brockton	5,000.00	5,000.00	--	Bituminous macadam	860
Carver	1,500.00	750.00	750.00	Gravel and tar mixed in place	2,700
Carver	2,500.00	1,250.00	1,250.00	Gravel and asphalt mixed in place	5,600
East Bridgewater	5,950.00	2,975.00	2,975.00	Bituminous concrete	2,050
Halifax	2,000.00	1,000.00	1,000.00	Gravel and asphalt mixed in place	3,150
Halifax	4,000.00	2,000.00	2,000.00	Bridge and approaches (in conjunction with the Town of Bridgewater)	--
Hanover	5,100.00	2,550.00	2,550.00	Broken stone and asphalt mixed in place	2,930
Hanover	1,000.00	1,000.00	--	Maintenance	10,367
Hanson	5,000.00	2,500.00	2,500.00	Bituminous concrete	1,500
Kingston	4,000.00	2,000.00	2,000.00	Gravel and tar mixed in place	3,006
Lakeville	4,000.00	2,000.00	2,000.00	Gravel and asphalt mixed in place	6,750
Marion	4,250.00	2,125.00	2,125.00	Crushed stone and tar mixed in place	2,106
Marshfield	8,500.00	4,250.00	4,250.00	Bituminous macadam	4,500
Mattapoisett	6,400.00	3,200.00	3,200.00	Bituminous concrete	1,840



Counties and towns	State	Contributions Town	County	Type of road or Nature of work	Length con- tracted for (Feet)
<u>Plymouth County</u>					
Middleborough	\$ 6,400.00	\$ 3,200.00	\$ 3,200.00	Bituminous concrete	2,200
Pembroke	5,000.00	2,500.00	2,500.00	Bituminous concrete	1,148
Plymouth	5,500.00	2,750.00	2,500.00	Grading and Drainage	4,690
Plymouth	5,000.00	2,500.00	2,500.00	Bituminous concrete	3,050
Plympton	4,000.00	1,000.00	1,000.00	Gravel and tar mixed in place	4,200
Rochester	4,000.00	2,000.00	2,000.00	Gravel and asphalt mixed in place	3,000
Rockland	10,000.00	5,000.00	5,000.00	Bituminous concrete	2,115
Scituate	7,500.00	3,750.00	3,750.00	Bituminous concrete	1,570
West Bridgewater	5,100.00	2,550.00	2,550.00	Bituminous concrete	1,850
Whitman	6,000.00	3,000.00	3,000.00	Bituminous concrete	1,605
Whitman	5,000.00	2,500.00	2,500.00	Bituminous concrete	1,420
<u>Suffolk County</u>					
Boston	20,000.00	20,000.00	--	Bituminous concrete	2,114
Winthrop	10,000.00	10,000.00	--	Bituminous concrete	3,258
<u>Worcester County</u>					
Ashburnham	2,000.00	1,000.00	1,000.00	Gravel and tar mixed in place	1,750
Ashburnham	15,000.00	--	--	Culvert	--
Ashburnham	1,500.00	800.00	1,500.00	Maintenance	43,269
Athol	4,000.00	2,000.00	2,000.00	Gravel and tar mixed in place	2,100
Athol	10,000.00	5,000.00	5,000.00	Bituminous macadam	1,812
Athol	1,500.00	1,500.00	1,500.00	Maintenance	62,567
Auburn	10,000.00	5,000.00	5,000.00	Bituminous concrete	2,284
Auburn	500.00	500.00	500.00	Maintenance	16,649
Barre	1,000.00	1,000.00	1,000.00	Maintenance	41,809

Counties and Towns	State	Contributions Town	County	Type of road or Nature of work	Length con- tracted for (Feet)
<b>Worcester County</b>					
Berlin	\$ 2,000.00	\$ 1,000.00	\$ 1,000.00	Gravel and tar mixed in place	1,150
Berlin	2,500.00	1,000.00	2,500.00	Maintenance and tar mixed in place	54,448
Blackstone	6,000.00	3,000.00	3,000.00	Broken stone and asphalt mixed in place	3,090
Blackstone	4,000.00	2,000.00	2,000.00	Grading and drainage	4,400
Blackstone	1,000.00	1,000.00	1,000.00	Maintenance	58,857
Bolton	3,000.00	1,000.00	2,000.00	Bituminous concrete in place	1,800
Bolton	1,500.00	1,000.00	1,500.00	Maintenance	60,532
Boylston	1,500.00	1,500.00	1,500.00	Maintenance	51,055
Brookfield	2,000.00	1,000.00	1,000.00	Grading	1,900
Brookfield	2,000.00	1,000.00	2,000.00	Maintenance	22,220
Charlton	3,500.00	1,500.00	2,000.00	Gravel and tar mixed in place	1,750
Charlton	2,000.00	1,000.00	2,000.00	Maintenance	51,622
Charlton	3,500.00	1,500.00	2,000.00	Gravel and tar mixed in place	4,849
Clinton	1,100.00	850.00	1,100.00	Bridge approaches	--
Clinton	9,000.00	4,500.00	4,500.00	Penolithic pavement	3,990
Clinton	1,800.00	--	--	Repairs	350
Clinton	500.00	500.00	500.00	Maintenance	25,288
Douglas	4,000.00	2,000.00	2,000.00	Flood repairs	--
Douglas	500.00	500.00	500.00	Maintenance	25,936
Dudley	6,000.00	3,000.00	3,000.00	Gravel and asphalt mixed in place	3,150
Dudley	1,000.00	1,000.00	1,000.00	Maintenance	21,979
East Brookfield	3,000.00	1,500.00	1,500.00	Gravel and tar mixed in place	2,850
East Brookfield	600.00	600.00	600.00	Maintenance	29,697
Gardner	7,000.00	3,500.00	3,500.00	Bituminous concrete	2,650



Counties and Towns	State	Contributions Town	County	Type of road or Nature of work	Length co tracted (Feet)
<b>Worcester County</b>					
Gardner	\$ 400.00	\$ 400.00	\$ 400.00	Maintenance	36,432
Grafton	4,000.00	2,000.00	2,000.00	Broken stone and tar mixed in place	2,850
Grafton	1,500.00	1,500.00	1,500.00	Maintenance	1,820
Grafton	1,000.00	1,000.00	1,000.00	Maintenance	32,416
Hardwick	1,000.00	1,000.00	1,000.00	Maintenance	49,441
Harvard	1,800.00	400.00	1,400.00	Gravel and tar mixed in place	2,820
Harvard	1,000.00	1,000.00	1,000.00	Maintenance	48,371
Holden	5,000.00	2,500.00	2,500.00	Gravel and tar mixed in place	2,850
Holden	1,200.00	1,200.00	1,200.00	Maintenance	50,033
Hubbardston	5,000.00	1,000.00	4,000.00	Gravel and asphalt mixed in place and Flood repairs	--
Hubbardston	1,500.00	1,000.00	1,500.00	Maintenance	74,634
Lancaster	3,000.00	1,500.00	1,500.00	Gravel and asphalt mixed in place	2,400
Leicester	8,000.00	4,000.00	4,000.00	Bituminous concrete	3,685
Leicester	280.00	--	--	Culvert repairs	--
Leicester	900.00	900.00	900.00	Maintenance	49,170
Lunenburg	5,000.00	2,500.00	2,500.00	Bituminous concrete	1,900
Lunenburg	1,500.00	1,000.00	1,500.00	Maintenance	51,718
Mendon	4,700.00	2,100.00	2,600.00	Gravel and tar mixed in place	3,050
Mendon	1,000.00	1,000.00	1,000.00	Maintenance	42,182
Milford	20,000.00	10,000.00	10,000.00	Bituminous concrete	6,285
Millbury	10,000.00	5,000.00	5,000.00	Bituminous concrete	3,200
Millbury	800.00	800.00	800.00	Maintenance	27,388
Millville	14,500.00	5,000.00	6,500.00	Two bridges and approaches	--

Counties and Towns	State	Contributions Town	County	Type of road or Nature of work	Length of traveled (Feet)
<b>Worcester County</b>					
Millville	\$ 1,000.00	—	\$ 1,000.00	Maintenance	17,443
New Braintree	2,000.00	\$ 1,000.00	1,000.00	Gravel and tar mixed in place	1,150
New Braintree	1,000.00	500.00	1,000.00	Maintenance	51,888
North Brookfield	4,000.00	2,000.00	2,000.00	Bituminous concrete	1,900
North Brookfield	700.00	700.00	700.00	Maintenance	34,471
Northborough	300.00	300.00	300.00	Maintenance	18,109
Northbridge	5,000.00	2,500.00	2,500.00	Gravel and asphalt mixed in place	2,650
Northbridge	4,000.00	2,000.00	2,000.00	Bituminous concrete	800
Northbridge	600.00	600.00	600.00	Maintenance	44,207
Oakham	4,000.00	2,000.00	2,000.00	Gravel and asphalt mixed in place	3,250
Oakham	1,300.00	1,100.00	1,300.00	Maintenance	57,390
Oxford	1,000.00	1,000.00	1,000.00	Maintenance	36,403
Paxton	2,250.00	750.00	1,500.00	Gravel and tar mixed in place	1,250
Paxton	1,275.00	425.00	850.00	Gravel and asphalt mixed in place	1,250
Paxton	2,200.00	1,100.00	2,200.00	Maintenance	43,276
Petersham	3,000.00	1,500.00	1,500.00	Gravel and asphalt mixed in place	2,000
Petersham	1,500.00	1,500.00	1,500.00	Maintenance	33,588
Phillipston	3,350.00	1,000.00	2,350.00	Gravel and bitumen road mix	3,520
Phillipston	1,500.00	1,000.00	1,500.00	Maintenance	47,561
Princeton	2,800.00	1,400.00	1,400.00	Gravel and tar mixed in place	2,050
Princeton	2,800.00	1,400.00	1,400.00	Gravel and tar mixed in place	2,200
Princeton	2,250.00	1,500.00	2,250.00	Maintenance	94,143
Royalston	1,250.00	500.00	750.00	Repairs	21,200



Counties and Towns	State	Contributions Town	County	Type of road or Nature of work	Length contracted for (Feet)
Worcester County					
Royalston	\$ 1,250.00	\$ 500.00	\$ 750.00	Gravel and asphalt mixed in place and flood repairs	--
Royalston	2,300.00	1,300.00	2,300.00	Maintenance	51,955
Rutland	3,000.00	1,500.00	1,500.00	Grading	1,500
Rutland	3,000.00	1,500.00	1,500.00	Gravel and asphalt mixed in place	1,950
Rutland	2,000.00	1,600.00	2,000.00	Maintenance	60,072
Shrewsbury	25,000.00	5,000.00	10,000.00	Grading and drainage	3,722
Shrewsbury	1,500.00	1,500.00	1,500.00	Maintenance	23,677
Southborough	2,000.00	1,000.00	1,000.00	Bituminous macadam	790
Southborough	600.00	600.00	600.00	Maintenance	27,734
Southbridge	12,400.00	6,200.00	6,200.00	Bituminous concrete in place	1,740
Southbridge	4,000.00	2,000.00	2,000.00	Bituminous concrete	706
Southbridge	750.00	750.00	750.00	Maintenance	32,286
Spencer	10,000.00	5,000.00	5,000.00	Bituminous concrete	1,645
Spencer	1,000.00	1,000.00	1,000.00	Maintenance	49,450
Sterling	4,000.00	2,000.00	2,000.00	Gravel and tar mixed in place	4,880
Sterling	2,000.00	1,000.00	1,000.00	Gravel and asphalt mixed in place	1,770
Sterling	2,500.00	2,000.00	2,500.00	Maintenance	46,146
Sturbridge	3,600.00	1,200.00	2,400.00	Gravel and tar mixed in place	1,625
Sturbridge	3,000.00	1,000.00	2,000.00	Gravel and tar mixed in place	2,200
Sturbridge	350.00	350.00	350.00	Maintenance	20,174
Sutton	4,000.00	2,000.00	2,000.00	Gravel and asphalt mixed in place	2,200
Sutton	4,000.00	2,000.00	2,000.00	Gravel and asphalt mixed in place	1,650
Sutton	1,500.00	750.00	750.00	Gravel and asphalt mixed in place	800

Counties and Towns	State	Contributions Town	County	Type of road or Nature of work	Length con- tracted for (Feet)
<b>Worcester County</b>					
Sutton	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	Maintenance <del>and gravel</del>	59,434
Templeton	6,000.00	3,000.00	3,000.00	Gravel and asphalt mixed in place	4,300
Templeton	1,500.00	1,500.00	1,500.00	Maintenance	62,350
Upton	2,000.00	1,000.00	1,000.00	Gravel and tar mixed in place	600
Upton	700.00	700.00	700.00	Maintenance	26,852
Uxbridge	6,000.00	3,000.00	3,000.00	Gravel and asphalt mixed in place	2,627
Uxbridge	10,000.00	5,000.00	5,000.00	Bituminous concrete	2,885
Uxbridge	1,000.00	1,000.00	1,000.00	Maintenance	58,935
Warren	3,000.00	1,000.00	2,000.00	Gravel and tar mixed in place	1,614
Warren	500.00	500.00	500.00	Maintenance	17,100
Webster	6,000.00	3,000.00	3,000.00	Bituminous concrete	1,516
West Boylston	5,000.00	2,500.00	2,500.00	Bituminous concrete	2,720
West Boylston	1,000.00	500.00	500.00	Gravel and tar mixed in place	500
West Boylston	1,500.00	1,000.00	1,500.00	Maintenance	42,768
West Brookfield	1,000.00	500.00	500.00	Drainage	--
West Brookfield	2,500.00	500.00	2,000.00	Drainage	--
West Brookfield	500.00	500.00	500.00	Maintenance	48,554
Westborough	10,000.00	5,000.00	5,000.00	Bituminous concrete	2,405
Westborough	1,200.00	1,200.00	1,200.00	Maintenance	53,661
Westminster	5,000.00	2,000.00	3,000.00	Gravel and asphalt mixed in place	3,300
Westminster	2,000.00	1,000.00	2,000.00	Maintenance	69,698
Winchendon	600.00	600.00	600.00	Maintenance	19,594
Worcester	30,000.00	25,000.00	15,000.00	Bituminous concrete	7,760
Worcester	13,715.00	11,427.00	6,858.00	Bituminous concrete	1,950



Counties and Towns	State	Contributions Town	County	Type of road or Nature of work	Length con- tracted for (Feet)
Worcester County					
Worcester	\$ 4,285.00	\$ 3,573.00	\$ 2,142.00	Premixed bituminous gravel	1,651
Worcester	15,000.00	7,500.00	7,500.00	Bituminous concrete	2,915

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EXPENDITURES FOR CONSTRUCTION OF TOWN AND COUNTY WAYS

(Section 34, Chapter 90, General Laws, Ter. Ed.)



Hampden County.— Agawam, \$1,446.63; Blandford, \$3,643.11; Brimfield, \$5,846.06; Chester, \$4,035.37; Chicopee, \$16,399.76; East Longmeadow, \$4,846.06; Granville, \$6,668.77; Hampden, \$6,038.51; Holland, \$3,400.94; Longmeadow, \$7,645.06; Ludlow, \$4,512.30; Monson, \$14,994.03; Montgomery, \$2,256.31; Palmer, \$6,375.96; Russell, \$1,194.43; Southwick, \$2,999.35; Springfield, \$5,890.49; Tolland, \$2,654.29; Wales, \$1,891.14; West Springfield, \$15,327.40; Wilbraham, \$460.64.

Hampshire County.— Amherst, \$13,794.94; Belchertown, \$17,141.64; Chesterfield, \$15,432.14; Cummington, \$331.79; Easthampton, \$15,992.03; Goshen, \$1,231.59; Hadley, \$7,556.85; Huntington, \$564.03; Middlefield, \$4,570.27; Northampton, \$7,602.63; Pelham, \$8,546.98; South Hadley, \$3,359.84; Westhampton, \$2,919.72; Williamsburg, \$2,388.87; Worthington, \$12,947.70.

Middlesex County.— Acton, \$8,074.65; Arlington, \$1,201.86; Ashby, \$1,701.11; Ashland, \$2,643.75; Ayer, \$13,908.90; Bedford, \$6,317.29; Billerica, \$5,537.32; Belmont, \$10,492.51; Boxboro<sup>n</sup>, \$1,240.27; Burlington, \$14,376.47; Cambridge, \$26,864.83; Carlisle, \$561.24; Chelmsford, \$10,831.57; Concord, \$13,866.98; Dracut, \$7,334.99; Dunstable, \$1,541.58; Everett, \$41,058.44; Framingham, \$22,535.13; Groton, \$6,352.53; Holliston, \$3,857.77; Hopkinton, \$305.28; Hudson, \$19,878.03; Lexington, \$14,465.17; Lincoln, \$2,847.17; Littleton, \$1,833.86; Lowell, \$17,581.02; Malden, \$39,793.70; Marlboro<sup>n</sup>, \$10,052.55; Maynard, \$13,459.26; Medford, \$15,702.18; Natick, \$30,249.21; Newton, \$12,132.89; North Reading, \$4,744.86; Pepperell, \$3,199.81; Reading, \$23,152.97; Sherborn, \$3,171.30; Shirley, \$6,106.24; Somerville, \$25,966.38; Stoneham, \$13,333.00; Stow, \$309.43; Sudbury, \$4,463.71; Tewksbury, \$9,390.35; Townsend, \$5,414.51; Tyngsboro, \$3,999.59; Wakefield, \$12,048.85; Waltham, \$14,603.61; Watertown, \$26,129.18; Wayland, \$11,944.55; Westford, \$4,698.07; Wilmington, \$2,122.37; Winchester, \$31,223.76; Woburn, \$31,519.09.

Nantucket County.— Nantucket, \$1,326.11.

Norfolk County.— Avon, \$1,161.25; Bellingham, \$1,124.05; Braintree, \$12,972.69; Brookline, \$5,632.72; Canton, \$1,405.45; Dedham, \$12,216.40; Dover, \$398.14; Foxboro<sup>n</sup>, \$2,455.22; Franklin, \$5,105.38; Holbrook, \$7,318.26; Medfield, \$630.40; Medway, \$265.43; Millis, \$570.61; Milton, \$4,068.39; Needham, \$663.57; Norfolk, \$663.57; Norwood, \$29,966.58; Plainville, \$83.17; Quincy, \$29,917.92; Randolph, \$1,592.58; Sharon, \$7,629.95; Stoughton, \$5,913.68; Walpole, \$19,753.45; Wellesley, \$2,330.76; Westwood, \$17,036.70; Weymouth, \$2,202.08; Wrentham, \$2,450.36.

Plymouth County.— Abington, \$7,034.64; Brockton, \$24,240.98; Carver, \$3,726.72; East Bridgewater, \$5,963.95; Halifax, \$3,069.06; Hanover, \$7,672.26; Hanson, \$12,881.82; Hull, \$57,054.52; Kingston, \$8,256.51; Lakeville, \$4,945.33; Marshfield, \$845.00; Mattapoisett, \$792.74; Middleboro<sup>n</sup>, \$2,756.60; Pembroke, \$1,576.17; Plymouth, \$12,989.66; Plympton, \$5,487.27; Rochester, \$5,031.75; Rockland, \$10,159.70; Wareham, \$7,431.29; West Bridgewater, \$3,800.67; Whitman, \$17,987.31.

Suffolk County.— Winthrop, \$6,890.33.

Worcester County.— Ashburnham, \$4,644.37; Athol, \$13,012.56; Auburn, \$4,144.99; Barre, \$9,991.45; Berlin, \$7,619.54; Blackstone, \$8,889.62;



~~Worcester County (cont'd)~~ - Bolton, \$7,557.18; Boylston, \$2,586.67; Brookfield, \$7,083.68; Charlton, \$8,914.12; Clinton, \$7,572.51; Dana, \$4,378.53; Douglas, \$7,538.43; Dudley, \$7,607.51; East Brookfield, \$9,952.19; Fitchburg, \$17,370.58; Gardner, \$7,104.77; Grafton, \$2,775.95; Hardwick, \$1,394.57; Harvard, \$4,538.51; Holden, \$10,297.52; Hubbardston, \$5,984.79; Lancaster, \$557.40; Leicester, \$8,649.61; Lunenburg, \$4,131.90; Mendon, \$5,538.82; Milford, \$22,407.67; Millbury, \$5,884.71; Millville, \$2,241.64; New Braintree, \$2,534.03; Northboro, \$398.07; North Brookfield, \$7,046.34; Northbridge, \$1,652.38; Oakham, \$10,556.75; Oxford, \$3,109.94; Paxton, \$5,954.90; Petersham, \$2,785.84; Phillipston, \$4,775.62; Princeton, \$7,922.33; Royalston, \$6,870.36; Rutland, \$7,833.02; Shrewsbury, \$2,451.04; Southboro, \$3,743.67; Southbridge, \$38,006.89; Spencer, \$10,088.09; Sterling, \$9,814.25; Sturbridge, \$3,781.4; Sutton, \$2,754.80; Templeton, \$6,241.99; Upton, \$4,563.18; Uxbridge, \$15,410.89; Warren, \$836.63; Webster, \$9,765.24; Westboro, \$15,283.59; West Boylston, \$5,512.26; West Brookfield, \$5,615.25; Westminster, \$4,170.16; Winchendon, \$463.47; Worcester, \$54,886.15.

Worcester	28	4,200.00	2,200.00
Sandwich	67	10,200.00	4,200.00
Truro	30	4,200.00	1,200.00
Wellfleet	33	2,200.00	4,200.00

Berkshire County

Alford	14	2,200.00	700.00
Becket	27	2,200.00	2,200.00
Cheshire	42	2,200.00	2,200.00
Clarkburg	14	2,200.00	2,200.00
Daguerre	24	2,200.00	2,200.00
Florida	43	2,200.00	2,200.00
Hancock	30	4,200.00	1,200.00
Hinsdale	22	2,200.00	2,200.00
Lanesborough	43	2,200.00	2,200.00
Monterey	50	2,200.00	2,200.00
N. Washington	22	2,200.00	2,200.00
New Ashford	11	2,200.00	2,200.00
New Marlborough	43	12,200.00	4,200.00
Oris	41	2,200.00	1,200.00
Paxton	27	2,200.00	2,200.00
Shutland	34	2,200.00	2,200.00
Sandisfield	20	2,200.00	2,200.00
Savoy	19	2,200.00	2,200.00
Sheffield	19	2,200.00	2,200.00
Tyringham	23	2,200.00	2,200.00
Washington	21	2,200.00	2,200.00
W. Stockbridge	20	2,200.00	2,200.00
Winchendon	20	2,200.00	2,200.00

Bristol County

Berkley	20		
Freetown	20		
Horton	20		
Raynham	20		
Rehoboth	20		
Uxbridge	20		



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REPAIR AND IMPROVEMENT OF PUBLIC WAYS, EXCLUSIVE OF STATE HIGHWAYS,  
IN CERTAIN TOWNS

(Sections 26 to 29 and 31 of Chapter 81 of the General Laws, as appearing in the Tercentenary Edition thereof, as amended with reference to Section 26 by Chapter 366 of the Acts of 1934)

During the year the Department contracted for work to be done in the towns named in the following table, which also shows the road mileage in the towns and the allotments or contributions by the State and towns:-

Counties and Towns					Miles of Road	State	Allotment Town
<u>Barnstable County</u>							
Brewster	.	.	.	.	40	\$ 6,000.00	\$ 5,000.00
Eastham	.	.	.	.	43	6,450.00	3,225.00
Mashpee	.	.	.	.	28	4,200.00	2,100.00
Sandwich	.	.	.	.	67	10,050.00	6,700.00
Truro	.	.	.	.	30	4,500.00	3,750.00
Wellfleet	.	.	.	.	37	5,550.00	4,625.00
<u>Berkshire County</u>							
Alford	.	.	.	.	19	\$ 2,850.00	760.00
Becket	.	.	.	.	59	8,850.00	2,360.00
Cheshire	.	.	.	.	42	6,300.00	3,150.00
Clarksburg	.	.	.	.	14	2,100.00	2,100.00
Egremont	.	.	.	.	34	5,100.00	2,550.00
Florida	.	.	.	.	43	6,450.00	3,225.00
Hancock	.	.	.	.	30	4,500.00	1,200.00
Hinsdale	.	.	.	.	35	5,250.00	2,625.00
Lanesborough	.	.	.	.	43	6,450.00	3,225.00
Monterey	.	.	.	.	50	7,500.00	2,000.00
Mt. Washington	.	.	.	.	20	3,000.00	500.00
New Ashford	.	.	.	.	11	1,650.00	275.00
New Marlborough	.	.	.	.	85	12,750.00	3,400.00
Otis	.	.	.	.	41	6,150.00	1,640.00
Peru	.	.	.	.	37	5,550.00	555.00
Richmond	.	.	.	.	34	5,100.00	2,550.00
Sandisfield	.	.	.	.	80	12,000.00	1,200.00
Savoy	.	.	.	.	56	8,400.00	840.00
Sheffield	.	.	.	.	79	11,850.00	3,950.00
Tyringham	.	.	.	.	25	3,750.00	1,250.00
Washington	.	.	.	.	51	7,650.00	765.00
W. Stockbridge	.	.	.	.	36	5,400.00	3,600.00
Windsor	.	.	.	.	65	9,750.00	975.00
<u>Bristol County</u>							
Berkley	.	.	.	.	42	6,300.00	3,150.00
Freetown	.	.	.	.	47	7,050.00	3,525.00
Norton	.	.	.	.	57	8,550.00	5,700.00
Raynham	.	.	.	.	45	6,750.00	4,500.00
Rehoboth	.	.	.	.	109	16,350.00	8,175.00
Swansea	.	.	.	.	61	9,150.00	9,150.00

-2-  
Miles  
of  
Road

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Allotment  
Town

Counties and Towns

Dukes County

Chilmark . . . .	14	\$ 2,100.00	\$1,750.00
West Tisbury . . . .	13	1,950.00	1,950.00

Essex County

Boxford . . . .	53	\$ 7,950.00	\$3,975.00
Georgetown . . . .	35	5,250.00	4,375.00
Groveland . . . .	30	4,500.00	3,750.00
Merrimac . . . .	31	4,650.00	4,650.00
Middleton . . . .	30	4,500.00	4,500.00
Newbury . . . .	38	5,700.00	5,700.00
Rowley . . . .	31	4,650.00	3,875.00
West Newbury . . . .	37	5,550.00	3,700.00

Franklin County

Ashfield . . . .	80	\$ 12,000.00	\$3,200.00
Bernardston . . . .	40	6,000.00	3,000.00
Buckland . . . .	45	6,750.00	6,750.00
Charlemont . . . .	49	7,350.00	2,450.00
Colrain . . . .	85	12,750.00	4,250.00
Conway . . . .	72	10,800.00	2,880.00
Deerfield . . . .	75	11,250.00	9,375.00
Gill . . . .	34	5,100.00	2,550.00
Hawley . . . .	49	7,350.00	735.00
Heath . . . .	53	7,950.00	795.00
Leverett . . . .	38	5,700.00	1,520.00
Leyden . . . .	39	5,850.00	585.00
Monroe . . . .	18	2,700.00	2,700.00
New Salem . . . .	65	9,750.00	975.00
Northfield . . . .	66	9,900.00	4,950.00
Orange . . . .	78	11,700.00	11,700.00
Rowe . . . .	40	6,000.00	1,600.00
Shelburne . . . .	49	7,350.00	7,350.00
Shutesbury . . . .	38	5,700.00	950.00
Sunderland . . . .	34	5,100.00	3,400.00
Warwick . . . .	56	8,400.00	840.00
Wendell . . . .	48	7,200.00	1,920.00
Whately . . . .	40	6,000.00	3,000.00

Hampden County

Blandford . . . .	74	\$ 11,100.00	1,850.00
Brimfield . . . .	60	9,000.00	2,400.00
Chester . . . .	68	10,200.00	3,400.00
Granville . . . .	73	10,950.00	5,475.00
Hampden . . . .	34	5,100.00	2,550.00
Holland . . . .	32	4,800.00	480.00
Monson . . . .	101	15,150.00	7,575.00
Montgomery . . . .	28	4,200.00	700.00
Southwick . . . .	50	7,500.00	5,000.00
Tolland . . . .	40	6,000.00	1,000.00



Counties and Towns

State

Town

Hampden County

Wales . . .	25	\$ 3,750.00	\$1,000.00
Wilbraham . . .	44	6,600.00	6,600.00

Hampshire County

Belchertown . . .	109	\$16,350.00	\$4,360.00
Chesterfield . . .	59	8,850.00	1,475.00
Cummington . . .	49	7,350.00	1,225.00
Goshen . . .	29	4,350.00	1,160.00
Granby . . .	48	7,200.00	2,400.00
Hadley . . .	58	8,700.00	7,250.00
Hatfield . . .	47	7,050.00	7,050.00
Huntington . . .	41	6,150.00	3,075.00
Middlefield . . .	41	6,150.00	615.00
Pelham . . .	31	4,650.00	2,325.00
Plainfield . . .	49	7,350.00	735.00
Southampton . . .	56	8,400.00	2,800.00
Westhampton . . .	46	6,900.00	690.00
Williamsburg . . .	44	6,600.00	3,300.00
Worthington . . .	68	10,200.00	1,700.00

Middlesex County

Acton . . .	59	\$ 8,850.00	\$8,850.00
Ashby . . .	56	8,400.00	2,800.00
Ashland . . .	38	5,700.00	5,700.00
Bedford . . .	36	5,400.00	5,400.00
Boxborough . . .	23	3,450.00	920.00
Burlington . . .	39	5,850.00	5,850.00
Carlisle . . .	42	6,300.00	3,150.00
Dracut . . .	63	9,450.00	9,450.00
Dunstable . . .	37	5,550.00	925.00
Groton . . .	72	10,800.00	10,800.00
Holliston . . .	50	7,500.00	7,500.00
Hopkinton . . .	66	9,900.00	8,250.00
Littleton . . .	42	6,300.00	6,300.00
North Reading . . .	35	5,250.00	5,250.00
Pepperell . . .	69	10,350.00	6,900.00
Sherborn . . .	43	6,450.00	6,450.00
Shirley . . .	46	6,900.00	5,750.00
Stow . . .	43	6,450.00	3,225.00
Sudbury . . .	64	9,600.00	8,000.00
Tewksbury . . .	61	9,150.00	9,150.00
Townsend . . .	70	10,500.00	5,250.00
Tyngsborough . . .	41	6,150.00	3,075.00
Westford . . .	85	12,750.00	10,625.00

Norfolk County

Bellingham . . .	45	\$6,750.00	\$6,750.00
Medfield . . .	41	6,150.00	6,150.00
Medway . . .	45	6,750.00	6,750.00
Millis . . .	42	6,300.00	6,300.00

Counties and Towns

Alletment  
State      Town

Norfolk County

Norfolk . . . .	42	\$6,300.00	\$4,200.00
Plainville . . . .	32	4,800.00	4,000.00

Plymouth County

Carver . . . .	65	\$9,750.00	\$6,500.00
Halifax . . . .	34	5,100.00	3,400.00
Hanson . . . .	36	5,400.00	5,400.00
Lakeville . . . .	43	6,450.00	4,300.00
Norwell . . . .	47	7,050.00	5,875.00
Pembroke . . . .	49	7,350.00	6,125.00
Plympton . . . .	31	4,650.00	2,325.00
Rochester . . . .	50	7,500.00	3,750.00

Worcester County

Ashburnham . . . .	75	\$11,250.00	\$5,625.00
Barre . . . .	110	16,500.00	8,250.00
Berlin . . . .	39	5,850.00	2,925.00
Bolton . . . .	53	7,950.00	2,650.00
Boylston . . . .	40	6,000.00	3,000.00
Brookfield . . . .	35	5,250.00	3,500.00
Charlton . . . .	110	16,500.00	5,500.00
Douglas . . . .	70	10,500.00	5,250.00
Dudley . . . .	63	9,450.00	9,450.00
East Brookfield . . . .	19	2,850.00	2,375.00
Grafton . . . .	70	10,500.00	10,500.00
Hardwick . . . .	96	14,400.00	4,800.00
Harvard . . . .	56	8,400.00	5,600.00
Holden . . . .	77	11,550.00	9,625.00
Hubbardston . . . .	75	11,250.00	1,875.00
Lancaster . . . .	58	8,700.00	7,250.00
Leicester . . . .	66	9,900.00	8,250.00
Lunenburg . . . .	66	9,900.00	6,600.00
Mendon . . . .	36	5,400.00	3,600.00
Millville . . . .	16	2,400.00	2,400.00
New Braintree . . . .	49	7,350.00	1,960.00
North Brookfield . . . .	68	10,200.00	6,800.00
Northborough . . . .	47	7,050.00	5,875.00
Oakham . . . .	45	6,750.00	1,125.00
Oxford . . . .	66	9,900.00	8,250.00
Paxton . . . .	29	4,350.00	2,900.00
Petersham . . . .	68	10,200.00	3,400.00
Phillipston . . . .	41	6,150.00	1,025.00
Princeton . . . .	73	10,950.00	2,920.00
Royalston . . . .	67	10,050.00	2,680.00
Rutland . . . .	68	10,200.00	3,400.00
Southborough . . . .	46	6,900.00	6,900.00
Spencer . . . .	101	15,150.00	12,625.00
Sterling . . . .	73	10,950.00	5,475.00
Sturbridge . . . .	70	10,500.00	5,250.00
Sutton . . . .	84	12,600.00	6,300.00
Templeton . . . .	63	9,450.00	9,450.00
Upton . . . .	60	9,000.00	4,500.00



Allotment

State

Town

Counties and Towns

Worcester County

Warren . . . . .	66	\$9,900.00	\$6,600.00
West Boylston . . . . .	36	5,400.00	5,400.00
West Brookfield . . . . .	53	7,950.00	3,975.00
Westborough . . . . .	62	9,300.00	9,300.00
Westminster . . . . .	78	11,700.00	5,850.00

# EXPENDITURES FOR REPAIR AND IMPROVEMENT OF PUBLIC WAYS

The expenditures during the year in various counties were:-

Barnstable,	\$34,546.89	Hampden,	\$101,030.54
Berkshire,	139,151.01	Hampshire,	119,356.38
Bristol,	60,831.63	Middlesex,	167,634.80
Dukes,	4,046.09	Norfolk,	40,220.72
Essex,	45,565.18	Plymouth,	53,160.36
Franklin,	201,162.45	Worcester,	324,087.55
		Total,	\$ 1,290,793.60

Details of the foregoing expenditures follow:-

Barnstable County.- Brewster, \$5,136.50; Dennis, \$469.51; Eastham, \$6,259.68; Mashpee, \$4,235.90; Sandwich, \$8,286.24; Truro, \$4,794.98; Wellfleet, \$5,364.08.

Berkshire County.- Alford, \$2,220.08; Becket, \$7,458.17; Cheshire, \$6,370.85; Clarksburg, \$2,344.83; Egremont, \$4,860.69; Florida, \$6,948.25; Hancock, \$3,553.82; Hinsdale, \$6,666.69; Lanesboro, \$5,340.13; Monterey, \$5,708.72; Mt. Washington, \$3,520.84; New Ashford, \$1,624.45; New Marlborough, \$11,039.87; Otis, \$5,152.75; Peru, \$7,186.52; Richmond, \$5,483.89; Sandisfield, \$9,776.42; Savoy, \$9,251.38; Sheffield, \$12,518.01; Tyringham, \$3,998.19; Washington, \$4,174.79; West Stockbridge, \$5,408.31; Windsor, \$8,543.36.

Bristol County.- Berkley, \$7,770.46; Freetown, \$6,281.23; Norton, \$4,102.84; Raynham, \$11,412.66; Rehoboth, \$18,457.12; Swansea, \$12,807.32.

Dukes County.- Chilmark, \$1,981.56; West Tisbury, \$2,064.53;

Essex County.- Boxford, \$8,056.41; Georgetown, \$5,554.02; Groveland, \$5,282.67; Merrimac, \$5,599.27; Middleton, \$4,802.82; Newbury, \$5,818.43; Rowley, \$4,810.85; West Newbury, \$5,640.71;

Franklin County.- Ashfield, \$13,414.69; Bernardston, \$6,680.46; Buckland, \$7,853.16; Charlemont, \$8,244.43; Colrain, \$14,732.45; Conway, \$12,967.54; Deerfield, \$13,220.65; Gill, \$5,735.65; Hawley, \$8,244.45; Heath, \$9,752.28; Leverett, \$6,735.29; Leyden, \$5,983.34; Monroe, \$3,404.12; New Salem, \$10,384.05; Northfield, \$11,821.15; Orange, \$11,711.77; Rowe, \$6,707.35; Shelburne, \$8,024.27; Shutesbury, \$6,259.27; Sunderland, \$5,531.03; Warwick, \$9,088.26; Wendell, \$8,507.02; Whately, \$6,159.77.

Hampden County.- Blandford, \$12,484.03; Brimfield, \$9,431.20; Chester, \$12,250.87; Granville, \$11,726.67; Hampden, \$5,844.17; Holland, \$4,184.96; Montgomery, \$4,174.09; Monson, \$17,687.55; Southwick, \$7,402.53; Tolland, \$6,244.47; Wales, \$2,951.31; Wilbraham, \$6,648.69.

Hampshire County.- Belchertown, \$16,368.38; Chesterfield, \$9,253.09; Cummington, \$8,493.08; Enfield, \$1,201.73; Goshen, \$4,915.07; Granby, \$6,710.77; Greenwich, \$866.37; Hadley, \$9,304.30; Hatfield, \$7,737.18; Huntington, \$5,491.14; Middlefield, \$3,850.93; Pelham, \$5,180.09; Plainfield, \$7,738.60; Prescott, \$670.73; Southampton, \$8,818.58; Westhampton, \$8,328.34; Williamsburg, \$6,824.59; Worthington, \$7,603.41.



*EXPENDITURES FOR CONSTRUCTION OF TOWN AND COUNTY WAYS*  
(Section 34, Chapter 90, General Laws, Ter. Ed.)

expenditures during the year in various counties were:-

Barnstable,	\$120,123.64	Hampshire,	\$114,381.02
Berkshire,	224,881.76	Middlesex,	616,141.14
Bristol,	332,640.85	Nantucket,	1,326.11
Dukes,	7,256.89	Norfolk,	175,528.76
Essex,	277,577.83	Plymouth,	203,703.95
Franklin,	48,607.05	Suffolk,	6,890.33
Hampden,	118,176.06	Worcester,	465,200.40
		Total	\$2712,435.79

Details of the foregoing expenditures follow:-

Barnstable County.- Barnstable, \$15,509.68; Bourne, \$19,778.06; Brewster, \$8,134.14; Dennis, \$1,658.93; Falmouth, \$39,695.45; Harwich, \$13,319.44; Mashpee, \$4,556.70; Orleans, \$9,495.23; Sandwich, \$575.00; Wellfleet, \$7,401.01.

Berkshire County.- Adams, \$11,379.15; Alford, \$6,569.88; Becket, \$1,248.83; Cheshire, \$2,573.35; Clarksburg, \$656.16; Dalton, \$13,381.74; Egremont, \$1,307.24; Florida, \$257.04; Great Barrington, \$10,995.00; Hancock, \$22,466.83; Hinsdale, \$8,876.09; Lanesborough, \$6,894.07; Lee, \$16,185.90; Lenox, \$7,674.73; Monterey, \$1,855.35; Mt. Washington, \$942.84; New Ashford, \$325.15; New Marlboro, \$4,376.03; North Adams, \$32,424.41; Otis, \$964.73; Peru, \$6,146.21; Pittsfield, \$41,452.20; Richmond, \$4,774.24; Sandisfield, \$.70; Sheffield, \$553.90; Stockbridge, \$6,341.54; Tyringham, \$1,004.65; Washington, \$8,994.08; West Stockbridge, \$1,489.56; Windsor, \$2,770.16.

Bristol County.- Acushnet, \$6,437.50; Attleboro, \$12,146.40; Berkley, \$1,257.14; Dartmouth, \$12,156.86; Dighton, \$2,374.08; Easton, \$6,821.23; Fairhaven, \$1,247.75; Fall River, \$253,736.01; Freetown, \$398.14; North Attleboro, \$2,983.70; Rehoboth, \$984.80; Seekonk, \$19,117.23; Taunton, \$12,319.54; Westport, \$660.47.

Dukes County.- Gay Head, \$3,669.28; Oak Bluffs, \$3,587.61.

Essex County.- Amesbury, \$10,947.40; Andover, \$1,547.37; Beverly, \$17,775.75; Boxford, \$3,516.94; Danvers, \$8,251.20; Essex, \$1,128.07; Georgetown, \$1,327.14; Gloucester, \$7,036.36; Groveland, \$117.37; Hamilton, \$16,284.97; Haverhill, \$23,815.42; Ipswich, \$21,136.30; Lawrence, \$12,781.95; Lynn, \$402.79; Lynnfield, \$11,675.65; Manchester, \$10,149.39; Marblehead, \$12,232.66; Methuen, \$16,857.05; Middleton, \$11,798.20; Newbury, \$929.00; North Andover, \$4,518.93; Peabody, \$17,772.94; Rockport, \$9,085.77; Rowley, \$2,388.86; Salem, \$6,625.51; Salisbury, \$2,886.54; Saugus, \$11,834.58; Swampscott, \$310.58; Topsfield, \$13,337.81; Wenham, \$13,888.31; West Newbury, \$5,217.02.

Franklin County.- Ashfield, \$1,327.11; Charlemont, \$1,857.99; Colrain, \$1,855.55; Deerfield, \$1,858.00; Gill, \$1,061.72; Greenfield, \$4,645.01; Montague, \$1,725.29; New Salem, \$1,194.43; Northfield, \$7,425.87; Orange, \$11,280.02; Shutesbury, \$1,858.00; Sunderland, \$10,660.06; Whately, \$1,858.00.



Middlesex County.- Acton, \$8,448.46; Ashby, \$7,213.81; Ashland, \$5,111.51; Bedford, \$6,085.54; Boxborough, \$2,442.58; Burlington, \$5,762.71; Carlisle, \$5,071.03; Dracut, \$8,238.92; Dunstable, \$5,332.80; Groton, \$11,013.97; Holliston, \$6,037.23; Hopkinton, \$7,217.81; Littleton, \$6,343.66; North Reading, \$5,568.14; Pepperell, \$11,477.22; Sherborn, \$6,942.79; Shirley, \$6,558.64; Stow, \$7,176.32; Sudbury, \$6,630.96; Tewksbury, \$9,894.02; Townsend, \$10,692.33; Tyngsborough, \$6,723.36; Westford, \$11,120.99.

Norfolk County.- Bellingham, \$5,745.11; Medfield, \$7,876.98; Medway, \$7,775.35; Millis, \$7,364.67; Norfolk, \$7,207.27; Plainville, \$4,251.34.

Plymouth County.- Carver, \$8,304.33; Halifax, \$5,890.75; Hanson, \$5,956.9; Lakeville, \$6,357.17; Norwell, \$6,251.78; Pembroke, \$7,717.07; Plympton, \$5,368.28; Rochester, \$7,314.03.

Worcester County.- Ashburnham, \$5,985.04; Barre, \$12,243.87; Berlin, \$5,378.03; Bolton, \$7,489.17; Boylston, \$5,075.12; Brookfield, \$3,224.73; Charlton, \$11,341.26; Douglas, \$9,728.50; Dudley, \$9,204.69; E. Brookfield, \$3,108.59; Grafton, \$11,261.47; Hardwick, \$8,815.41; Harvard, \$6,327.49; Holden, \$10,769.36; Hubbardston, \$9,380.66; Lancaster, \$8,078.90; Leicester, \$8,968.25; Lunenburg, \$7,579.74; Mendon, \$5,562.38; Millville, \$4,855.67; New Braintree, \$5,128.45; North Brookfield, \$10,042.09; Northboro<sup>an</sup>, \$4,605.39; Oakham, \$4,473.69; Oxford, \$6,923.32; Paxton, \$4,169.78; Petersham, \$10,834.45; Phillipston, \$4,044.76; Princeton, \$10,203.26; Royalston, \$8,023.61; Rutland, \$9,053.69; Southboro<sup>ugh</sup>, \$1,378.20; Spencer, \$13,737.98; Sterling, \$12,069.10; Sturbridge, \$9,151.32; Sutton, \$11,537.81; Templeton, \$5,571.18; Upton, \$5,833.77; Warren, \$5,880.17; Westboro<sup>ugh</sup>, \$10,086.90; W. Boylston, \$5,603.83; W. Brookfield, \$6,311.97; Westminster, \$9,414.50;



Sections 29-33, Chapter 93, General Laws, as amended)

In accordance with provisions of sections 29 to 33 inclusive, chapter 93, General Laws, as amended by chapters 85, 237, 334 and 490, Acts of 1924, providing for control of billboards and other advertising devices on public ways or on private property within public view of any highway, public park or reservation, the Department adopted on January 24, 1924, certain new rules and regulations, superseding all former issues; and these have continued in force during the present year.

APPLICATIONS, LICENSES AND PERMITS - Licenses were granted to (21) individuals and others to engage in the business of advertising in the Commonwealth by the use of outdoor signs.

1145 applications were received for permits for the erection of advertising signs. 2343 permits were granted for the year including 102 individual advertisers whose permits mainly consisted of a sole application. The greater part of these individual applications were obtained at the information desk maintained in the office of this Division for the purpose of educating and explaining the various provisions of the Law.

Of 3,585 renewal applications sent to those whose permits were to expire June 30, 1938, 3,522 were returned to the Department requesting renewal; and on account of the advertisers failing to renew, (65) were cancelled. The number of renewal applications approved was 3,235. The total of permits in force November 30, 1938 was 5,218.

RECEIPTS AND EXPENDITURES - Total receipts for the year ending November 30, 1938 were \$27,251.26 and expenditures were \$27,882.51.

THE REMOVAL OF SIGNS - The "Sign Patrol" consisting of small trucks completely equipped for the work, have removed 50,000 signs during the year in addition to 6,000 removed by other agents of the Department, under authority of Section 30 A, Chapter 93, General Laws, from within the highways and from private property.

HEARINGS - Hearings were given to officials of the Towns of Saugus and North Reading.

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## REGISTRY OF MOTOR VEHICLES . . . .

The 1938 statistics show a small decrease in the various classes of applications handled as compared with the figures for 1937. While, in 1937, the reissues, each representing usually the registration of a new car in place of one previously registered, accounted for nearly 50% of the total increase in registrations, the figures for this same class of applications are accountable for approximately 92% of the total decrease in registrations for 1938.

Highway safety retained its important place in the activities of the Registrar. Strict and rigid enforcement by the Registrar, together with his inspectors and the police, both state and local, and the continued cooperation of safety committees, enabled the Registrar to show a reduction in both fatal and personal injuries over the previous year.

The scope of the work of the Registry has broadened during the past few years due to newly enacted legislation. Chapter 492, which became effective on Oct. 14, 1938, placed an additional burden upon the division. This act makes it mandatory on the part of the Registrar to suspend the certificate of registration of all those who fail to pay their excise tax thirty days after the mailing of notice. During this period the work of the Registry was especially heavy, the machinery of the division being already in operation handling registration applications for the ensuing year. Approximately 60,000 notices were mailed to delinquent excise tax payers as a result of the passage of the above chapter.



REGISTRATIONS OF PASSENGER CARS, COMMERCIAL VEHICLES AND MOTOR CYCLES

A few of the outstanding figures for the year as compared with those of the previous year are as follows:

The following registration figures show a 7.35% decrease in passenger registrations, a 3.6% decrease in commercial registrations and a 34.7% decrease in motor cycle registrations for the year 1938.

	1937	1938
Certificates of registration issued	1,085,869	1,009,882
Compulsory insurance cancellation notices received	67,811	76,178
Licenses to operate issued	1,177,924	1,191,262
Examinations of applicants for licenses	109,729	78,279
Licenses and registrations revoked and suspended	58,358	54,807
Licenses revoked for driving under influence of liquor	6,829	6,251
Total number of applications handled	2,354,600	2,286,000
Gross receipts from fees	\$6,945,602.30	\$6,803,792.69

# REGISTRATIONS OF PASSENGER CARS, COMMERCIAL VEHICLES AND MOTOR CYCLES

The following registration figures show a 7.38% decrease in passenger registrations, a 3.6% decrease in commercial registrations and a 34.7% decrease in motor cycle registrations for the year 1938 as compared with the previous year.

	1904	1914	1924	1934	1937	1938
Passenger cars	3,772	77,246	580,489	831,853	964,956	893,692
Commercial vehicles	-	-	91,826	112,260	119,737	115,423
Motor cycles	<u>489</u>	<u>8,161</u>	<u>10,778</u>	<u>1,375</u>	<u>1,176</u>	<u>767</u>
Totals	4,261	85,407	683,093	945,488	1,085,869	1,009,882



# EXAMINATIONS FOR LICENSES

The appointment system of examining new operators was continued during the year 1938. The following figures show that there was a decrease in the number of persons examined at the 54 examining points in the State.

	1937	1938
Operators passed	96,760	72,897
Operators unfit	6,583	4,919
Restriction removal, passed	541	264
Restriction removal, unfit	44	23
"Competency", passed	6,710	159
"Competency", unfit	<u>117</u>	<u>17</u>
Total examinations	110,755	78,279

\*Includes Out Bluffs and White Sulphur Springs.

(1) This figure includes approximately 140,000 persons.

(2) Does not include persons who have been licensed.

# BRANCH OFFICES

No new branch offices of the Registry were established, nor was the teletype machine installation extended to any of the branches not formerly so equipped.

The following figures give an approximate idea of the distribution of the volume of applications presented by the public.

## APPROXIMATE DISTRIBUTION OF REGISTRATIONS, LICENSES, ETC.

	Regis- trations	First Licenses	License Renewals	Miscel- laneous	Totals
Boston:					
Counter	178,000	-	173,000	80,900	431,900
Mail	181,300	-	408,000	11,300	600,600
Examination	-	17,000	-	1,200	18,200
Pittsfield	26,200	2,600	23,200	7,200	59,200
Springfield	49,300	5,300	59,300	16,700	130,600
Greenfield	12,700	1,200	12,500	3,900	30,300
Northampton	10,500	1,100	11,500	3,100	26,200
Worcester	53,500	5,200	59,400	17,500	135,600
Fitchburg	21,800	2,400	21,100	6,500	51,800
Framingham	23,600	2,500	20,000	7,200	53,300
Lawrence	20,700	2,700	28,300	5,000	56,700
Lowell	20,700	2,200	25,400	5,600	53,900
Fall River	24,200	3,900	26,400	7,300	61,800
New Bedford	22,800	2,400	30,500	7,000	62,700
Lynn	44,300	5,100	50,400	14,000	113,800
Quincy	34,700	6,400	42,600	12,200	95,900
Brockton	38,400	2,700	37,400	13,500	92,000
Hyannis*	12,800	1,500	8,600	3,900	26,800
Haverhill	13,600	1,600	15,500	3,900	34,600
Holyoke	11,400	1,000	13,700	3,400	29,500
Malden	26,500	2,700	25,100	7,600	61,900
Waltham	24,000	4,000	23,700	7,000	58,700
	851,000(2)	73,500	1,115,600	245,900(1)	2,286,000

\*Includes Oak Bluffs and Nantucket.

(1) This figure includes approximately 166,500 number plate reissues

(2) Does not include reissues (see Miscellaneous)



# COMPULSORY MOTOR VEHICLE LIABILITY INSURANCE

The following figures show the volume of papers received and notices mailed in connection with the carrying out of the law regarding compulsory motor vehicle liability insurance.

## Causes for Cancellation of Policies:

	1937	1938
For non-payment of premiums	52,466	63,381
For other reasons	15,345	12,797
Totals	67,811	76,178

## Origin of requests for Cancellation of Policies:

Insurance companies	45,779	44,556
Finance companies	22,032	31,622
Totals	67,811	76,178

## Disposition of applications for cancellation:

Replacement certificates, adjusting cancellations	6,500	6,437
Reinstatements, adjusting cancellations	37,464	44,613
Sets of plates returned before effective date of cancellation	4,148	4,604
Revocations	19,699	20,524
Totals	67,811	76,178

## Return of Plates:

Returned promptly after revocation	11,184	11,112
By Police	4,940	6,625
Not returned	3,575	2,787
Total revocations	19,699	20,524

## PROPERTY DAMAGE

Under the provisions of Section 22A of Chapter 90, General Laws, the Registrar may, upon receipt of evidence satisfactory to him suspend the license of any operator who has failed to satisfy a judgment rendered against him after sixty days in any case in which such operator is the defendant in an action brought to recover damages for injuries to property arising out of the use, operation or maintenance on the ways of the Commonwealth of a motor vehicle or trailer.

The following figures indicate the number of cases in which successful plaintiffs availed themselves of the additional facilities provided in the law for recovering damages and the action taken thereon:

	1937	1938
Complaints received	582	753
Releases received, no action being necessary	158	214
Licenses or rights to operate suspended	424	539
Licenses or rights to operate reinstated after suspension	235	263

## EXCISE TAX

Under the provisions of Section 2A of Chapter 60A, General Laws, which was effective Oct. 14, 1938, the Registrar shall, when he receives a notice of non-payment of an excise from a tax collector, give written notice to the owner of the motor vehicle that the registration will be suspended at the expiration of thirty days from the date of mailing such notice unless within said period there is filed with the Registrar evidence satisfactory to him that the excise due has been paid.

The following disposition was made of the 59,655 cases in which this excise tax law applied.

Suspensions	5,074
Notices of Payment received, no action being necessary	39,800
Plates returned and ownership transferred prior to receipt of notice	14,781



## A I R C R A F T

The following report for the year shows a substantial increase in flying in the Commonwealth.

The increase in minor accidents is without doubt due to the increase in flying. It is encouraging to note, however, that there was no increase in fatal accidents.

The airmarking program is progressing satisfactorily, 52 new markers having been completed during the year.

It was necessary to promulgate complete new sets of regulations for aircraft, airmen and airports to comply with the provisions of Chapter 417 of the Acts of 1938.

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	1937	1938
Pilots' certificates issued	1260	1511
Aircraft certificates issued	304	419
Duplicates issued	9	11
Suspensions of pilots and aircraft	167	130
Aircraft grounded	66	98
Reinstatements of suspensions and groundings	44	90
Regulations promulgated	1	2
Surveys of landing areas	50	22
Landing areas approved (5 temporary)	0	28
Landing areas disapproved	0	3
Plans of buildings for airmarking	178	0
Airmarkers completed under State promotion	61	52
Reports made by aircraft inspectors	2550	2707
Airplane accidents	29	44

	1937	1938
Fatal accidents	3	3
Personal injury accidents	5	8
No injury accidents	21	33
Persons killed in airplane accidents	3	3
Persons injured in airplane accidents	6	13

	1937	1938
Ground accidents	12	16
Personal injury accidents	0	2
No injury accidents	12	14
Persons injured in ground accidents	0	2

25 airport plans have been furnished Federal Relief Agencies

40 airport plans have been furnished the Civil Aeronautics Authority in connection with the National Airport Survey

4 special surveys have been made for the WPA

4 atlases made for department use

4 airport construction estimates made

Airport directory compiled



Caps.  
Periodic Inspection of Motor Vehicle Equipment

In accordance with Section 7A of Chapter 90 of the General Laws, inspections of the equipment of all motor vehicles registered in the Commonwealth were held during the months of May and September. The present was the ninth year of these compulsory inspections and the fourth year that they have been held semi-annually. As hitherto, all inspections were conducted at official inspection stations designated by the Registrar. The inspection system is now so well organized and so generally accepted by the public as a means of making our highways safer, that no difficulties were encountered in completing the inspection of approximately 775,000 pleasure cars, trucks, trailers and buses during each period. The number of complaints received from motorists alleging improper inspection procedure or overcharging continued as formerly to fall off and it was found necessary to cancel but fifty-five stations during the two inspection periods. The results of the inspections may be summarized as follows:

		May	September
O.K.		30%	40%
Foot Brake	Defective	19%	16%
Emergency Brake	"	13%	10%
Lights	"	54%	44%
Horn	"	2.6%	2.5%
Muffler	"	1.6%	1.2%
Steering Gear	"	3.3%	2.4%
Windshield Cleaner	"	3.4%	2.8%
Number Plates	"	1%	.9%

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School Bus <sup>Caps.</sup> Inspections

For the seventh consecutive year, school buses operated in Massachusetts under contract with, or owned by, cities or towns were inspected five times during the year, in the first weeks of September, November, January, March and May. The inspection work was done by the same official inspection stations which conducted the periodic inspection of all motor vehicles, directly under the supervision of the equipment section. A different procedure is followed in inspecting these vehicles than is the case of the periodic inspection of all motor vehicles, in that the stations do not issue stickers as evidence that the bus has passed inspection, but report to the equipment section on forms provided by this office and then, if the reports are satisfactory, the sticker is issued by the equipment section. This permits a more complete control of this very necessary and important inspection, since in all cases where there may be any doubt as to the safety of a vehicle, an inspector of the department examines the vehicle before the approval certificate is issued.

It is significant that since the School Bus Act was first enacted in 1932, there has been no serious school bus accident in Massachusetts, a record which has probably not been excelled or even equalled in any other state. Each inspection included the examination of 938 vehicles.

<sup>Caps.</sup>  
Brakes, Lights, Miscellaneous and Equipment

Approximately 60 inspectors were regularly assigned to the equipment section for enforcement and equipment work. That this



concentration of effort on the actual operation of motor vehicles and their mechanical condition is effective in increasing highway safety was evidenced by the results. Despite the fact that Massachusetts won the safety award of the National Safety Council in 1937, 1938 showed a still further decrease of twenty per cent in fatalities, although there was a decrease of less than one per cent in total motor vehicle miles operated as shown by gasoline consumption. The road work of the equipment inspectors may be summarized as follows:

Reports of defective equipment.....	4,558
Light tags issued.....	42,648
Brake tags issued.....	21,591
Reports of Vehicles not inspected.....	5,407

In addition, the equipment inspectors reported 8,803 cases of improper operating for action by the Registrar and verbally warned thousands of drivers without report for action.

The registrations of 3,827 vehicles were suspended because of defective equipment as follows:

Defective brakes.....	2,305
Defective lights.....	670
Miscellaneous defective equipment	852

As in several previous years, the State Police cooperated with this department in compelling the correction of defective lighting equipment, especially operation with only one headlight or no tail light. Tags of the department were furnished to the State Police, who, during the present year, issued 42,727 tags to motorists. The tags were filed and handled by the equipment section.

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Because of unusual or particularly dangerous equipment defects, or because the motorists failed to return tags issued for serious equipment defects, 5,479 motorists were required to report with their vehicles at offices of the Registry, or official inspection stations, to show that the defects had been corrected.

Defective windshields seriously interfering with the vision of operators were handled in a similar manner by requiring that the vehicle be brought to the Registry and in 242 cases, the motor vehicle owner was required to replace the windshield.

The office also handled 7,153 cards reporting cars not inspected during the compulsory inspection periods; 836 miscellaneous written reports from inspectors and 10,646 reports of brake tests.

#### Headlamps, Tail Lamps and Reflex Reflectors

During the year, approval was granted to 6 tail lamps and 1 reflex reflector. No new headlamps were submitted for approval.



## MOTOR VEHICLE DEATHS, INJURIES, COLLISIONS

Deaths in connection with the operation of motor vehicles in the year 1938 numbered 622 as compared with 784 in the year before or 162 fewer, a 20.6% reduction. A comparative table of classified fatalities, injuries and collisions in the years 1937 and 1938 follows:

### Motor Vehicle Accidents to Persons

	Persons Killed (including children)		Persons Injured (including children)	
	1937	1938	1937	1938
Pedestrians by autos	436	353	12,299	10,920
Pedestrians by motorcycles	0	0	16	5
Pedestrians near street cars	1	0	16	6
Occupants of autos	302	215	35,751	34,860
Occupants of autos at R. R. crossings	7	16	18	44
Occupants of motorcycles	8	8	157	106
Bicycle riders	21	20	1,311	1,237
Occupants horse-drawn vehicles	4	0	95	84
Coasters on sleds	1	8	27	378
Coasters on wheels	4	2	164	117
Totals	784	622	49,854	47,757

	Children Killed		Children Injured	
	1937	1938	1937	1938
Boys	87	65	5,388	4,915
Girls	28	23	3,206	2,920
Totals	115	88	8,594	7,835

### Types of Collisions

	1937	1938
Collision with pedestrian	14,019	12,298
Collision with automobile	22,986	23,049
Collision with horse-drawn vehicle	131	120
Collision with railroad train	23	31
Collision with street car	275	250
Collision with fixed object	2,140	1,653
Collision with bicycle	1,628	1,507
Non-collision (overturn)	714	535
Collision with motorcycle	195	108
Collision with sled	26	407
Collision with animal	87	80
Coaster on wheels	183	150
Totals	42,407	40,188
In the daytime	23,876	24,291
After dark	18,531	15,897
Totals	42,407	40,188

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ACCIDENT REPORT LETTERS

As provided in Section 26, Chapter 90, General Laws, every operator of a motor vehicle in any manner involved in an accident in which any person is killed or injured is required to report in writing to the Registrar. The number of these formal accident reports received from operators in 1938 was 42,589 as compared with 44,839 received in 1937. Under the requirements of Section 29, Chapter 90, General Laws, 15,986 similar reports of accidents were received from police departments throughout the State in 1938 as against 17,847 received in 1937. In addition and in connection with this reporting of accidents by operators during the year 1938, there were received 7,392 letters and complaints reporting faulty operating, as compared with 8,730 such letters in 1937.



COMPARATIVE STATEMENT OF YEARLY REGISTRATIONS, LICENSES, DEATHS, INJURIES, REVOCATIONS AND SUSPENSIONS

Year	Automobiles Registered	Motor-Cycles Registered	Total Registrations	Number of Persons Killed	Number of Persons Injured	Licenses Issued	Total Suspensions and Revocations	For Operating Under Influence of Liquor
1910	31,360	3,358	34,718	77	963	41,259	283	22
1911	38,907	3,658	42,565	110	1,248	51,950	360	14
1912	50,132	5,034	55,166	142	1,962	66,645	546	56
1913	62,660	7,127	69,787	188	2,923	81,034	608	87
1914	77,246	8,161	85,407	229	4,010	99,532	8,580	131
1915	102,633	9,520	112,153	294	6,197	133,935	1,153	202
1916	136,809	10,713	147,522	315	9,131	171,596	1,396	320
1917	174,274	11,065	185,339	438	7,282	214,229	1,831	485
1918	193,497	12,862	206,359	499	8,598	235,140	2,343	553
1919	247,183	13,698	260,881	582	16,287	297,968	2,156	554
1920	304,538	15,142	319,680	481	21,182	261,539	2,944	888
1921	360,731	12,058	372,790	544	11,487	380,519	4,899	1,508
1922	449,838	11,675	461,513	522	15,277	444,173	8,369	2,460
1923	566,150	11,733	577,883	578	16,217	536,819	11,613	3,333
1924	672,315	10,778	683,093	709	19,579	620,439	14,154	4,395
1925	764,338	10,333	774,671	755	25,736	698,378	16,249	4,654
1926	826,224	9,215	835,439	705	25,351	763,951	18,705	4,863
1927	819,703	7,245	826,948	693	31,721	814,094	31,252	4,983
1928	883,595	6,656	890,251	715	42,201	870,160	40,814	5,071
1929	1,018,904	6,168	1,025,072	777	46,111	944,338	53,133	5,381
1930	1,008,476	4,642	1,013,118	795	44,279	982,795	52,954	5,052
1931	1,006,808	3,068	1,009,876	793	48,837	1,024,304	63,841	5,535
1932	921,909	1,661	923,570	768	47,658	1,014,635	73,511	4,824
1933	930,493	1,023	931,516	769	48,249	1,022,662	78,431	4,274
1934	944,713	1,375	946,088	921	53,055	1,053,527	52,505	5,717
1935	967,178	1,375	968,553	795	48,421	1,077,880	52,317	6,264
1936	1,033,487	1,316	1,034,803	817	45,462	1,128,516	52,705	6,486
1937	1,084,693	1,176	1,085,869	784	49,854	1,177,924	58,268	6,829
1938	1,009,115	767	1,009,882	622	47,757	1,191,262	54,407	6,251

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✓ Caps.  
INVESTIGATIONS AND PROSECUTIONS BY INSPECTORS

Investigations were made under the direction of the Chief Inspector relative to fatal and nonfatal accidents, violations of the laws concerning brakes and headlights, inspection of garages, miscellaneous complaints, and the prosecution of motorists in court. The tabulation below shows the wide range of these activities of the inspectors.

Classification of Reports

	1937	1938
Accidents, fatal	790	613
Accidents, nonfatal	1,284	1,096
General reputation	1,612	1,801
Miscellaneous	6,885	6,497
Totals	10,571	10,007
Complaints filed	36,798	39,298
Garages inspected	13,280	14,679
Headlights, brakes, etc.	93,101	71,894
Prosecutions	921	819
Amount of fines	\$31,001	\$23,922



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Revocations and Suspensions

	1937	1938
Licenses suspended	20,756	19,012
Licenses revoked	5,433	4,639
Rights suspended	6,718	5,975
Certificates suspended	4,645	4,108
Certificates revoked	19,806	20,084
Certificates and licenses suspended	32	35
Certificates and licenses revoked	330	313
Certificates revoked and rights suspended	30	39
Rights in Massachusetts suspended	608	602
<b>Totals</b>	<b>58,358</b>	<b>54,807</b>
Resulting from investigations	14,092	13,551
Resulting from court convictions	14,855	13,140
Resulting from police complaints	3,539	4,221
Resulting from judges' complaints	4	0
Resulting from <u>state</u> police complaints	6,169	3,979
Resulting from <u>insurance</u> cancellations	19,699	19,916
<b>Totals</b>	<b>58,358</b>	<b>54,807</b>

Character of Offenses

	1937	1938
Reckless and endangering life	1,935	1,708
Liquor convictions	5,004	4,255
Going away after accidents	581	500
Operating without authority	554	511
Racing	0	7
Improper person	5,137	5,024
Improper person, liquor	1,825	1,996
Improper operating	3,621	3,634
Two overspeeds	98	3
Three overspeeds	3	3
Insurance cancellations	19,699	19,916
Insurance convictions	411	394
Improper equipment, miscellaneous	803	891
Improper equipment, lights	671	656
Improper equipment, brakes	2,382	1,609
Fatal accidents	752	574
Property damage cases	399	548
Other offenses	96	658
Parking violations	5,455	5,033
Fifty milers	8,519	6,028
Forty-five milers	291	598
Minor Complaints	119	261
Failure to slow for pedestrian	3	0
<b>Totals</b>	<b>58,358</b>	<b>54,807</b>

## Court recommendations adopted:-

Reckless and endangering	41	43
Operating without authority	0	1
Going away after accidents	6	2
Insurance convictions	<u>1</u>	<u>0</u>
Totals	48	46

Persons whose licenses were suspended or  
revoked and who were required to pass  
examination

5,124 4,617

Registrations revoked on liquor convictions

1,476 1,387

Sections Driving  
Operating under influence of liquor  
Driving auto without authority  
Endangering lives  
Not stopping after causing injury  
Without license  
Without registration  
Unregistered vehicle  
Improper display of no parking signs  
Refusing to stop on signal  
Operating within 5 feet of street car  
Violation of Metropolitan Park Rules  
Operating after suspension or revocation of license  
Larceny  
Haulhaugter  
Miscellaneous  
Racing  
Operating after registration certificate revoked  
Passing red light  
Improper lights  
Buses not as required by law  
Violation of insurance law  
Not slowing down for pedestrians  
Not slowing down at intersecting way  
Violation of law of road  
Forgery-faking false statements on license application, falsely representing or pretending to obtain a license  
Lending a license to another  
Allowing intoxicated person to operate  
No windshield cleaner  
Attempted larceny  
Allowing improper person to operate

Total



# ANALYSIS OF COURT ABSTRACTS RECEIVED

	1937	1938
Number of courts forwarding abstracts	95	95
Total abstracts received	50,355	48,963
Abstracts recording convictions	36,967	37,337

## Offenses

(Analysis of convictions, not including appeals)

	1937	1938
Overspeeding	11,896	11,944
Reckless driving	13	5
Operating under influence of liquor	4,533	4,763
Using auto without authority	828	849
Endangering lives	2,762	2,845
Not stopping after causing injury	969	1,063
Without license	2,644	2,793
Without registration certificate	543	448
Unregistered vehicle	496	484
Improper display or no register number	127	130
Refusing to stop on signal	410	360
Operating within 8 feet of street car	71	78
Violation of Metropolitan Park rules	77	85
Operating after suspension or revocation of license	619	628
Larceny	160	269
Manslaughter	8	3
Miscellaneous	1,279	1,339
Racing	0	10
Operating after registration certificate revoked	17	9
Passing red light	597	591
Improper lights	267	283
Brakes not as required by law	164	194
Violation of insurance law	578	586
Not slowing down for pedestrian	58	61
Not slowing down at intersecting way	6,508	6,231
Violation of law of road	1,158	1,280
Perjury-Making false statements on license application, falsely impersonating or conspiring to obtain a license	30	10
Loaning a license to another	7	2
Allowing intoxicated person to operate	24	12
No windshield cleaner	1	0
Attempted larceny	26	24
Allowing improper person to operate	97	94
Total	36,967	37,337

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USED CAR SECTION  
(Motor Vehicle Identification)

The following is a resume of the work accomplished by the Used Car Section which indexes, under engine numbers, all motor vehicles registered and reported stolen, and checks reports of sales of used cars against the stolen-vehicle records. Dealers' and repairmen's plates and registration certificates are issued by this section.

The work of the section is summarized in the following tables:-

<u>Dealers</u>	1937	1938
Total number of first class dealers reporting	1,351	1,373
Total number of second and third class dealers reporting	628	704
	<hr/>	<hr/>
Total number making reports to this office	1,979	2,077

<u>Reports</u>		
Approximate number of notices of intended sales received daily	333	343
Approximate number of dealers' reports received daily	1,821	1,364

<u>Motor Vehicles Stolen</u>		
Number stolen in Boston	2,885	3,374
Number stolen in Massachusetts (including Boston)	7,726	7,452
Number reported stolen from various sources throughout the country, including Massachusetts	20,679	20,012
Number of motor vehicles recovered through information furnished by this office	330	282

<u>Engine and Serial Numbers</u>		
Engine numbers assigned to cars	9	6
Certificates issued authorizing the replacement of engine numbers	315	306
Certificates issued authorizing the replacement of serial numbers	90	112
Certificates issued authorizing the replacement of both engine and serial numbers	7	32
Total number of authorization certificates issued	421	456



ANALYSIS OF REVENUE

The fees received for the year 1938  
of certificates of registration  
the number of licenses granted, etc.

EASTERN CONFERENCE OF MOTOR VEHICLE ADMINISTRATORS  
AMERICAN ASSOCIATION OF MOTOR VEHICLE ADMINISTRATORS

Certificates of registration  
Commercial cars  
Buses  
Trailers  
Motorcycles

The department was represented at the annual meeting of the American Association of Motor Vehicle Administrators, held in Detroit October 4 to 7, 1938, and at the meeting of the Eastern Conference of Motor Vehicle Administrators, held at Lake Kezar, Maine, June 9 and 10, 1938.

At the Detroit meeting the Registrar read a paper on the Massachusetts system of semi-annual inspection of motor vehicle equipment, Massachusetts being admittedly in the lead in this kind of work; and inspection of equipment being of such tremendous importance in safety work, the subject took the leading place at the conference. Only a few of the states, up to that time, had adopted any plan for the inspection of equipment, but this conference gave great impetus to the installation of either the Massachusetts privately-owned system, or one similar to New Jersey's, wherein the state owns the stations.

Net fees	\$ 6,740,315.73
Court fines received by the Treasurer and Receiver-General*	3,320.25
Total receipts (not including gasoline tax**) credited Highway Fund account, 1938,	\$ 6,743,635.98

\*Fines imposed under the provisions of Chapter 83 are payable to the treasury of the county wherein the offense was committed, effective October 1, 1935. (Acts of 1935, Chapter 293).

\*\*Receipts from the gasoline tax, credited to the High-Way Fund, are collected through the office of the Commissioner of Corporations and Taxation.

# ANALYSIS OF RECEIPTS

The fees received for the year 1938, together with the number of certificates of registration issued in each classification and the number of licenses granted, etc., are shown in the following table:-

Certificates of Registration			
Passenger cars (including taxicabs)	888,977	\$	2,604,441.13
Commercial cars	115,423		1,378,741.87
Buses	4,715		130,716.15
Trailers	13,108		27,836.50
Motor cycles	767		1,082.00
Manufacturers or Dealers (including repairers)	2,981		8,942.00
Manufacturers or Dealers additional cars (including repairers)	20,315		60,941.00
Licenses to operate:			
Original licenses	73,740		147,480.00
Renewal licenses	1,117,522		2,234,845.00
Examinations	64,818	\$	129,636.
Re-examinations	13,461		13,461.
Total examinations	78,279		143,097.00
Copies of certificates and licenses furnished			
Duplicate number plates furnished	36,351		36,349.25
Miscellaneous receipts, process fees, etc.	10,459		10,459.00
			<u>18,861.79</u>
Total amount of fees		\$	6,803,792.69
Motor Vehicle fees rebated (deducted)			<u>63,276.63</u>
Net fees		\$	6,740,516.06
Court fines received by the Treasurer and Receiver-General*			
			<u>3,380.69</u>
Total receipts (not including gasoline tax**) credited Highway Fund Account, 1938,		\$	6,743,896.75

\*Fines imposed under the provisions of Chapter 90 are payable to the treasury of the county wherein the offence was committed, effective October 1, 1935. (Acts of 1935, Chapter 303).

\*\*Receipts from the gasoline tax, credited to the Highway Fund, are collected through the office of the Commissioner of Corporations and Taxation.



EXP

# ANALYSIS OF EXPENDITURES FOR THE FISCAL YEAR 1938

## PERSONAL SERVICES

### PERSONAL SERVICES

Salaries.....	\$1,091,813.90
Wages.....	<u>4,016.59</u>

\$1,095,830.49

## EXPENSES

### PERSONAL SERVICES

Salaries.....	\$ 4,756.70
Wages.....	<u>3,157.15</u>

7,913.85

### SUPPLIES

Employees Clothes.....	3,429.74
Other Printing.....	10,956.78
Sundry Office Supplies..	14,051.99
Electrical Supplies.....	25.34
Number Plates.....	<u>169,567.01</u>

198,030.86

### MATERIALS

Paper for Printing.....	
-------------------------	--

8,709.65

### CONTRACTUAL SERVICES

Postage.....	70,915.31
Telephone and Telegraph..	22,812.10
Sundry Communication.....	90.00
Equipment Repairs.....	3,031.11
Electricity and Gas.....	1,982.99
Printing.....	766.16
Freight and Express.....	<u>3,526.75</u>

103,124.42

### TRAVEL

Gas and Oil.....	1,671.57
Tires and Tubes.....	128.78
Sundry Motor Vehicle	
Supplies.....	79.26
Passenger Car Repairs	
(State owned).....	594.89
Mileage on Privately	
owned cars.....	112,759.98
Railroad fares.....	968.95
Bus, Taxi and Electric	
Fares.....	228.10



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Meals.....	\$ 7,146.55
Hotel.....	1,183.35
Telephone and Telegraph..	2,995.22
Sundry Travelling.....	
Expenses.....	1,501.36
Passenger autos replaced.	<u>3,088.25</u>

\$ 132,346.26

#### SUNDRY CONTRACTUAL SERVICES

Laundry Service.....	539.85
Sundry Contractual.....	<u>13,797.93</u>

14,337.78

#### EQUIPMENT

Adding and Accounting	
Machines.....	562.50
Files.....	3,556.00
Furniture.....	2,279.27
Typewriters.....	6,656.89
Sundry Office Equipment..	2,288.83
Sundry Equipment.....	<u>543.61</u>

15,887.10

#### CURRENT CHARGES AND OBLIGATIONS

Premium on Surety Bonds..	521.58
Rent, Building and Office	
Space.....	23,393.48
Machine Rentals.....	<u>1,206.00</u>

25,121.06

#### OUTLAY FOR EQUIPMENT

Adding and Accounting	
Machines.....	146.70
Furniture.....	97.35
Typewriters.....	1,558.63
Sundry Office Equipment..	1,289.72
Sundry Equipment.....	<u>3.50</u>

3,095.90

\$ 508,566.88

#### PUBLICITY FOR SAFETY WORK

#### SUPPLIES

Printed Office Forms....

\$ 759.50

SUMMARY

Personal Services.....	\$ 1,095,830.49
Expenses.....	508,566.88
Publicity for Safety Work.....	759.50
	<hr/>
	\$ 1,605,156.87
	<hr/>

to have charge of the work of the Division in accordance with the provisions of the Act. The Commissioner, with the approval of the Governor, appointed Richard E. Hale on October 12, 1913, as Director of the Division of Waterways.

Mr. Hale was appointed in December, 1913, Associate Commissioner of the Division of Waterways and Public Lands of the Department of Public Works and served in that position until July, 1927, when the establishment of the new Department of the Department became effective, making Mr. Hale the Commissioner of the Department. In October, 1928, Mr. Hale resigned as Associate Commissioner to become Director of the Division. Since 1913 he has been associated with the work relating to waterways and public lands.

The statute authorizing the organization of the Division also provides a method for further development of the work of Boston. The full text of this chapter is given in detail in this report.



Chapter 407 of the Acts of 1938 authorized the Commissioner of Public Works to organize a Division of Waterways in the Department of Public Works and, with the approval of the Governor, to appoint a Director to have charge of the work of the Division. In accordance with the provisions of the statute the Commissioner, with the approval of the Governor, appointed Richard K. Hale on October 13, 1938, the Director of the Division of Waterways.

Mr. Hale was appointed in December, 1919, Associate Commissioner of the Division of Waterways and Public Lands of the Department of Public Works and served in that capacity until July, 1927, when the consolidation of the two divisions of the Department became effective, making him Associate Commissioner of the Department. In October, 1938, Mr. Hale resigned as Associate Commissioner to become Director of the Division. Since 1919 he has been associated with the work relating to waterways and public lands.

The statute authorizing the organization of the Division also provides a method for further development of the port of Boston. The full text of this chapter is given elsewhere in this report.

## BOSTON HARBOR

Under a letter contract of September 28, 1938, with the Suffolk Engineering and Construction Company, repairs to the Commonwealth Pier 5, outside stucco at the head house were completed on Oct. 6,

1938, at a contract cost of \$325.70. Minor work necessary for the effective operation of the pier has been continued during the year. Repairs have been made to gangways, floating fenders, the sprinkler system, elevators, elevator machinery, Ogden doors and other doors of wood and metal, and to the heating plant.

The resurfacing of portions of the first and second floors at the pier with bituminous concrete on a Portland cement base, under contract of November 2, 1937 with the Warren Brothers Roads Company, was completed December 31, 1937, at a contract cost of \$12,659.99.

Under letter contract of June 28, 1938, certain rooms at the pier occupied by the Department of Public Safety were painted at a contract price of \$450.

With the increasing number of passenger boats using the pier, the method of transferring baggage by hand trucks and elevator from the ship to the passenger examination room has become most inconvenient. Urgent requests were made during 1937 for a more satisfactory system by representatives of the steamship lines embarking and disembarking passengers at this pier. In response to this need a contract was made on August 24, 1938 with the Norfolk Iron Company to furnish and install an electrically operated baggage conveyor, with accessory floor opening and penthouse, to extend from the first floor to the second floor near the harbor end of the center shed. The work was completed October 28, 1938, at a contract cost of \$3193.00.



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Under a letter contract of September 12, 1938, with the Suffolk Engineering and Contracting Company, repairs to the outside stucco at the head house were completed on Oct. 6, 1938, at a contract cost of \$326.70.

To provide for repairing damage caused by the September hurricane, a contract was made on October 19, 1938, with the Chandler Construction Company to repair roofs of the sheds and headhouse, ventilators, penthouse and flashing at the pier. This work is now in progress.

A summary of freight and passengers using the pier during 1938 follows, with a further tabulation showing tonnage handled at this pier from 1929-1938, inclusive.

NUMBER OF TONS FREIGHT AND PASSENGERS HANDLED AT COMM. PIER #5  
DURING FISCAL YEAR ENDING NOVEMBER 30, 1938

SS Line	No. of Ships	RR	Inward freight			Outward freight			Passengers		
			-tons-	Truck	Total	RR	-tons-	Truck	Total	In	Out
Amer.-Haw. SS Co.	99	24779	95,158		119,937	14,372	39,065	53,437			
Luck. SS Co., Inc.	64	7,722	62,542		70,264	9,940	25,266	35,206			
Norton, Lilly & Co.	27	3,045	11,645		14,690					33	33
Can. National SS Co.	71	16	768		784	1,133	582	1,715	3870	3518	7388
Italian Line	15					36	111	147		2268	2268
Furness Withy & Co.	2								19	221	240
Holland Amer. Line	1									149	149
Total	279	35,562	170,113		205,675	25,481	65,024	90,505	3889	6189	10078



TONNAGE HANDLED AT COMM. PIER 5 - CALENDAR YEARS

Year	Inward Freight (Tons)			Outward Freight (Tons)			Total by RR	Total by Truck	Total by RR & Truck
	Railroad	Truck	Total	Railroad	Truck	Total	In & Out	In & Out	In & Out
1929	85734	140212	225946	15222	39930	55152	100956	180142	281095
1930	59053	169466	228519	10855	32483	43338	69908	201949	271857
1931	64780	185729	250509	10999	32420	43419	75779	218149	293928
1932	38035	165746	203781	12489	45424	57913	50524	211170	261694
1933	25505	176165	201670	122 66	53595	65861	37771	229760	267531
1934	32384	163678	196062	15003	50392	65395	47387	214070	261457
1935	40521	189879	230400	15816	60418	76234	56337	250297	306634
1936	33004	164088	197092	21299	47011	68310	54303	211099	265402
1937	42583	181818	224401	25374	49755	75129	67957	231573	299530
1938	35562	170113	205675	25481	65024	90505	61043	235137	296180

Caps.

### Charges at Commonwealth Piers.

The tariff containing rules, regulations and charges governing the use of Commonwealth Pier 5, South Boston, and Commonwealth Pier 1, East Boston, became effective June 1, 1928 and has remained in force with only slight modifications since that time.

During the fall of 1937 conferences were held with representatives of the Steamship companies, consignees of cargoes, members of the Maritime Association of the Boston Chamber of Commerce, and firms shipping through the port of Boston, all interested in recommending certain changes in charges made for wharf storage at these piers.

The difficulty in fixing such charges comes, of course, from the necessity for finding a rate that will without undue inconvenience to shippers and consignees, facilitate the movement of cargo over and from the pier to prevent congestion.

The changes agreed upon after the conferences and public hearings have been embodied in Supplement No. 5 to the original tariff and became effective February 1, 1938.



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← Caps.

Development of Land South of Summer Street.

The seven sections of Storehouse No. 1 were occupied until May 1, 1938, by the Wiggin Terminals, Inc. Upon that date the Corporation released three sections and continued occupancy of the other four sections.

On September 30, 1938, a permit was granted to the State Department of Public Welfare, Surplus Commodities Division, for the temporary use of the three unoccupied sections for the storage of commodities received from the Federal Surplus Commodities Corporation and the Works Progress Administration. This permit is now in force.

To repair damage caused to this storehouse by the hurricane, a contract was made October 19, 1938, with the Chandler Construction Company to rebuild the roof over the platform, reconstruct a section of the hollow tile wall on the easterly side, to cover the new roof over the platform with composition roofing, to make repairs to the existing roof and to old skylights, to build new skylights and to repair downspouts. This work is not yet completed.

three members, one member of which shall be appointed by the Governor of the Commonwealth, one member by the Mayor of the city of Boston and one member by the Chief Justice of the Massachusetts Supreme Judicial Court."

In June, 1938, Chapter 40 of the resolves of 1938, was passed by the State Legislature and approved by the Governor to provide for a special unpaid commission to make an investiga-

THE COMMONWEALTH FLATS AT EAST BOSTON

AIRCRAFT LANDING FIELD--BOSTON AIRPORT.

The greater part of the area reclaimed by the Commonwealth at East Boston continues to be occupied by the city of Boston as an airport. On August 10, 1928, under authority of Chapter 64 of the Resolves of that year, the Department leased to the City approximately 5,717,000 square feet of land for this purpose. The use of an additional area of 4,210,760 square feet was authorized by a lease dated July 14, 1930, in accordance with the provisions of Chapter 53 of the Resolves of 1930. The matter of the lease to the City of two additional parcels, one northeasterly of the area leased in 1928 and 1930, the other southeasterly of the parcel leased in 1930, is still pending.

The two leases granted authorize the use of the areas involved until August 1, 1948, at a rental of \$1.00 per year through August 9, 1938. The leases provide that rental after August 9, 1938, shall be "an amount which shall be determined by a special commission which shall consist of three members, one member of which shall be appointed by the Governor of the Commonwealth, one member by the Mayor of the city of Boston and one member by the Chief Justice of the Massachusetts Supreme Judicial Court."

In June, 1938, Chapter 40 of the Resolves of 1938, was passed by the State Legislature and approved by the Governor to provide for a special unpaid commission to make an investiga-



tion and study of the Boston Airport and to report the results with its recommendations for legislation to the General Court in December.

In view of the questions involved in this investigation it has seemed best to await the report of the Commission before determining the rental for the period following August 9, 1938. of material dredged from various locations in the harbor have been deposited in the receiving basin. In the year ending November 30, 1938, about 22,500 cubic yards were dumped upon Flats northerly of Governor's Island. The Commonwealth has reclaimed approximately 150 acres of land at East Boston.

Under licenses granted for building bulkheads, dredging and filling the City has reclaimed for the extension of the Airport about 140 acres.

### Reclamation of Flats.

The work of dredging and filling at East Boston under contracts made by the Department for the purpose of reclaiming flats has been in abeyance since 1923. Between that year and November <sup>30</sup> ~~15~~, 1938, approximately 3,206,400 cubic yards of material dredged from various locations in the harbor have been deposited in the receiving basin. In the year ending November 30, 1938, about 22,590 cubic yards were dumped upon flats northerly of Governor's Island. The Commonwealth has reclaimed approximately 150 acres of land at East Boston.

Under licenses granted for building bulkheads, dredging and filling the City has reclaimed for the extension of the Airport about 140 acres.



EAST BOSTON--JEFFRIES POINT.

COMMONWEALTH PIER 1, EAST BOSTON.

Hearing was held Jan. 27, 1938, on petition of

John Fringale for dredging a channel and basin at Jeffries

Point. During the year the Mystic Terminal Company has used and

occupied the pier for unloading wood pulp and miscellaneous cargo and for the temporary storage of these cargoes. This use of the pier terminated November 30, 1938.

Minor repairs only have been needed this year at the pier. During 1938 one vessel docked at the pier to discharge a cargo of 2874 tons.

dredging and disposing of the dredged material 59.5 cents per cubic yard, side measurement; for removing and disposing of boulders \$80 per cubic yard. This work was completed Aug. 1, 1938, at a contract cost of \$11,304.41.

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EAST BOSTON--JEFFRIES POINT.

Hearing was held Jan. 27, 1938, on petition of John Tringale for dredging a channel and basin at Jeffries Point. Feet of bulkhead southerly of the Reserved Channel.

A contract was made on June 8, 1938, with the Bay State Dredging and Contracting Company to dredge to a depth of 6 feet at mean low water a channel about 450 feet long and 60 feet wide and a basin about 135 feet by 150 feet at Jeffries Point, at the following contract prices: for dredging and disposing of the dredged material 59.5 cents per cubic yard, scow measurement; for removing and disposing of boulders \$20 per cubic yard. This work was completed Aug. 1, 1938, at a contract cost of \$11,304.41. Removing and disposing of old piles of \$4.00 for each pile. This work was completed November 26, 1938, at a contract cost \$416.



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CASTLE ISLAND BULKHEAD.

On November 3, 1938, a letter contract was made with William R. Farrell and Son, Inc., for removing about 365 linear feet of bulkhead southerly of the Reserved Channel at the following contract price: for furnishing all labor, tools and equipment, doing all work necessary to remove the existing bulkhead and disposing of all material, \$2.72 for each linear foot of bulkhead removed. This work is now nearly completed.

A letter contract was made Nov. 16, 1938, with William R. Farrell and Son, Inc., for removing old piles from the beach southerly of the Reserved Channel near Marine Park, South Boston, at a contract price for furnishing all labor, tools and equipment and doing all work necessary for removing and disposing of old piles of \$4.00 for each pile. This work was completed November 26, 1938, at a contract cost \$416.

21  
MALDEN RIVER.

Hearing was held June 27, 1938.

The work of dredging in Malden River under contract of October 26, 1937, with the North Atlantic Dredging Company, was completed December 15, 1937, at a contract cost of \$18,784.80. Toward this cost a contribution of \$1000. was made by the Morton Oil Company.

The work of dredging in Malden River under contract of October 26, 1937, with the North Atlantic Dredging Company, was completed December 15, 1937, at a contract cost of \$18,784.80. Toward this cost a contribution of \$1000. was made by the Morton Oil Company.



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NEPONSET RIVER, BOSTON AND MILTON.

Hearing was held January 27, 1938, upon a petition of the Godfrey Coal Company and others for dredging in Neponset River. On July 6, 1938, a contract was made with Herbert T. Gerrish to dredge to a depth of 6 feet at mean low water a channel and basin in the upper end of the navigable portion of Neponset River in Boston and Milton, at the following contract prices: for dredging and disposing of the dredged material on shore 46 cents for each cubic yard measured in situ; for removing and disposing of boulders \$20. for each cubic yard. This work was completed September 8, 1938, at a contract cost of \$35,533.16. removing and disposing of boulders \$20. per cubic yard; for furnishing all labor and materials and building one manhole, the lump sum of \$350; and at unit prices for the remaining work. Toward the cost of this project a contribution of \$5000. has been made by the town. The work is now in progress.

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## HINGHAM HARBOR.

Hearing was held January 27, 1938, on a petition of the Selectmen for dredging in Hingham Harbor.

On November 1, 1938, a contract was made with the Bay State Dredging and Contracting Company for dredging a basin and berth to a depth of 6 feet at mean low water at Crow Point, Hingham, and for constructing a manhole and laying about 135 linear feet of 12-inch reinforced concrete pipe drain with concrete head wall, at the following contract prices: for dredging and disposing of dredged material 76 cents per cubic yard, measured in situ; for removing and disposing of boulders \$20. per cubic yard; for furnishing all labor and materials and building one manhole, the lump sum of \$350; and at unit prices for the remaining work. Toward the cost of this project a contribution of \$5000. has been made by the town. The work is now in progress.



QUINCY SHORE.

HULL SHORE

PEMBERTON POINT, HULL.

By Chapter 408 of the Acts of 1938, the Department of Public Works is authorized and directed to construct a sea wall along the shore of Great Hill in Quincy from a point at or about 100 feet northerly of property of the Quincy Yacht Club to a point at or Point at the following contract prices: for furnishing and placing granite stone riprap and chips in the jetties \$2.58 for each ton of 2,000 pounds in the completed work; for furnishing and placing granite stone riprap and chips along the face of the sea wall \$2.48 for each ton of 2000 pounds in the completed work; for removing existing riprap and replacing it \$1.00 for each ton of 2000 pounds replaced in the completed work. Under this contract work is now in progress.

Plans and specifications are being prepared for application to the Works Progress Administration for Federal funds required by the terms of the statute.

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QUINCY SHORE.

SEA WALL AT GREAT HEAD.

By Chapter 409 of the Acts of 1938, the Department of Public Works is authorized and directed to construct a sea wall along the shore of Great Hill in Quincy from a point at or about 100 feet northerly of property of the Quincy Yacht Club to a point at or near the property on which the pumping station of the South Metropolitan sewerage system is located. The act provides that the total cost of the work shall not exceed \$91,000, that the sum of \$16,000 shall be paid out of the State Treasury but no part of this amount is to be expended until not less than \$59,000 has been allotted for the project under the provisions of any appropriate Federal statute and the sum of \$16,000 paid into the State Treasury by the city of Quincy toward the cost of the work.

Plans and specifications are being prepared for application to the Works Progress Administration for Federal funds required by the terms of the statute.



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WEIR RIVER, HULL.

By Chapter 471 of the Acts of 1938 the Department of Public Works is authorized and directed to dredge Weir River in the town of Hull, subject to the following conditions: that the total cost of the work shall not exceed \$81,400.; that no work shall be begun until the County of Plymouth out of its current appropriation for highways and bridges has paid into the State Treasury \$10,000. and the town of Hull has paid into the State Treasury \$24,500, to be used with an appropriation by the Commonwealth of not more than \$46,900. for this work.

The contributions required by the terms of the Act were paid into the State Treasury in August, 1938.

A contract was made on August 3, 1938, with the J. S. Packard Dredging Company to dredge a channel about 220 feet wide in Weir River to the Nantasket Pier, and the north and south berths of said pier, in Hingham and Hull, to a depth of 15 feet at mean low water at the following contract prices: for dredging and disposing of the dredged material 45 cents per cubic yard, scow measurement; for removing and disposing of boulders \$50 per cubic yard; This work was completed September 28, 1938, at a contract cost of \$80,100.

MARINE BORERS.

Division

The Department of Public Works has continued this year its co-operation with the New England Committee on Marine Piling Investigation by maintaining, for the purpose of determining the activity of marine borers, four test boards in Boston Harbor at the following locations: Commonwealth Pier 1, East Boston; Commonwealth Pier 5, South Boston; Weymouth Fore River Bridge at Quincy Point, and at the wharf owned by the Commonwealth at South Bay, Roxbury.

Sample blocks removed each month are sent to the Committee for examination and for comparison with similar blocks from other stations on the New England coast. The results of these examinations are published by the Committee. with the requirement that the conditions be remedied. Necessary repairs have been made in one instance, and in another dilapidated wharves have been entirely removed from tide water and new structures built under license issued by the Department.



INSPECTION OF STRUCTURES IN TIDE WATER.

By means of the appropriation of \$3000. made available by Item ~~480~~ <sup>680</sup> of Chapter 356 of the Acts of 1938, the Department has been able to continue this year the inspection of structures in tide water. Fifty-nine structures have been inspected above mean low water and sixteen examined by a diver to determine their condition below the mean high water line.

Five reports have been made by the engineer to the Commissioners relative to structures not maintained in conformity with the licenses granted and plans accompanying the licenses. In each case reported the matter has been brought by the Department to the attention of the owners of the property with the requirement that the conditions be remedied. Necessary repairs have been made in one instance, and in another dilapidated wharves have been entirely removed from tide water and new structures built under license issued by the Department.

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RIVERS, HARBOR SURVEYS.

Surveys have been made during the year in connection with the maintenance and operation of property of the Commonwealth. Hydrographic surveys have been carried on for the purpose of providing data for the improvement of navigation in the Mystic River, at East Boston opposite the Boston and Albany Railroad Docks and at Jeffries Point, Chelsea Creek below Meridian Street Bridge, Malden River, Roxbury Canal, Neponset River, Dorchester Bay, Reserved Channel, Hingham Harbor, Weir River and Hull Bay.

After the September hurricane inspection was made of the sea walls built by the Commonwealth at Pemberton, Stony Beach and Point Allerton, in Hull, and at Houghs Neck, Quincy, to determine to what extent these structures were affected by the storm. Apparently none of these walls was damaged. and improvements in the following localities: Bass River, Dennis and Yarmouth; Bourne Shore, Bourne; Brewster Shore, Brewster; Cape Poge Channel, Edgartown; Cohasset Harbor, Cohasset; Crowsnest Neck, Wareham; Dennis Shore, Dennis; Duxbury Harbor, Duxbury; Falmouth Shore, Falmouth; Follens Pond, Jelly Bay and Bass River, Dennis and Yarmouth; Herring River and Allens Harbor, Harwich; Hyannisport Harbor, Barnstable; Ipswich River, Ipswich; Manchester Inner Harbor, Manchester; Maraspin Creek, Barnstable; Marblehead Harbor, Marblehead; Mattapoisett Shore, Mattapoisett; Nagsaset Harbor, Falmouth; Menauhant Shore, Falmouth; Nantucket Harbor, Nantucket; Oak Bluffs Shore, Oak Bluffs; Onset Bay, Wareham; Palmers Cove, Salem; Paskamansett River and Paskamansett Harbor, Dartmouth; Pilgrim Beach, Truro; Provincetown Shore, Provincetown; South River, Scituate and Marshfield; Wellfleet Harbor, Wellfleet;



RIVERS, HARBORS, TIDE WATERS AND FORESHORES

OUTSIDE OF BOSTON HARBOR.

For the improvement of rivers, harbors, tide waters and foreshores outside of Boston Harbor, in accordance with the provisions of section 11, Chapter 91, General Laws, an appropriation of \$100,000 was made during 1938, with the following condition:

"provided, that at least fifty per cent of the cost is covered by contributions from municipalities or other organizations and individuals, except that in the case of dredging channels for harbor improvements at least twenty-five per cent of the cost shall be so covered..."

An appropriation of \$20,000 was also available during the year for the maintenance of structures, and for repairing damages along the coast line or river banks of the Commonwealth, and for the removal of wrecks and other obstructions from tide waters and great ponds.

Petitions were filed with the Department this year for surveys and improvements in the following localities: Bass River, Dennis and Yarmouth; Bourne Shore, Bourne; Brewster Shore, Brewster; Cape Poge Channel, Edgartown; Cohasset Harbor, Cohasset; Cromasset Neck, Wareham; Dennis Shore, Dennis; Duxbury Harbor, Duxbury; Falmouth Shore, Falmouth; Follens Pond, Kelly Bay and Bass River, Dennis and Yarmouth; Herring River and Allens Harbor, Harwich; Hyannisport Harbor, Barnstable; Ipswich River, Ipswich; Manchester Inner Harbor, Manchester; Maraspin Creek, Barnstable; Marblehead Harbor, Marblehead; Mattapoissett Shore, Mattapoissett; Meganset Harbor, Falmouth; Menauhant Shore, Falmouth; Nantucket Harbor, Nantucket; Oak Bluffs Shore, Oak Bluffs; Onset Bay, Wareham; Palmers Cove, Salem; Paskamansett River and Padanarum Harbor, Dartmouth; Pilgrim Beach, Truro; Provincetown Shore, Provincetown; South River, Scituate and Marshfield; Wellfleet Harbor, Wellfleet;

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BARNSTABLE DREDGING  
HYANNIS HARBOR

Wellfleet Shore, Wellfleet; West Bay and Cotuit Harbor, Barnstable;  
Wild Harbor, Falmouth.

Public hearings have been held and estimates of cost made, but no work has been undertaken to carry out improvements petitioned for at Bass River, Dennis and Yarmouth; Bourne Shore; Cohasset Harbor; Cromesett Neck, Wareham; Duxbury Harbor; Follens Pond, Kelly Bay and Bass River, Dennis and Yarmouth; Manchester Inner Harbor; Marblehead Harbor; Mattapoisett Shore; Onset Bay, Wareham; Palmers Cove, Salem; Paskamansett River and Padanarum Harbor, Dartmouth; South River, Scituate and Marshfield; Wellfleet Harbor, Wellfleet. ~~at of \$300.00.~~

Information as to work previously done in rivers and harbors of the Commonwealth may be found in the annual reports of the Board of Harbor and Land Commissioners, the Commission on Waterways and Public Lands ~~of the Department of Public Works~~ and the Department of Public Works.

An account of the work done during 1938 for the improvement of rivers, harbors, tide waters and foreshores outside of Boston Harbor follows.



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BARNSTABLE DREDGING

HYANNIS HARBOR

Under contract of July 14, 1937, with Herbert T. Gerrish for dredging in Hyannis Harbor by the hydraulic process, the excavated material was deposited in a disposal area a short distance from the wharf of E. S. Petow. Some of this material washed by the winter storms caused shoaling at this wharf.

Under a letter contract of April 15, 1938, with the Bay State Dredging and Contracting Company the shoals were excavated to a depth of 6 feet at mean low water at a contract cost of \$800.00.

BARNSTABLE DREDGING

HYANNISPORT

Hearing was held on January 27, 1938, on petition of the Selectmen of Barnstable for the removal of boulders from Hyannisport Harbor.

A contract was made on June 21, 1938, with the James B. Fendle Company to remove about 200 cubic yards of boulders from an area lying northeast of the shore end of the stone breakwater at Hyannisport, at a contract price of \$10.00 per cubic yard for removing and disposing of boulders. This work was completed July 30, 1938 at a contract cost of \$2470.00. Toward this cost a contribution of \$1250.00 was made by the town.

measured in place; for removing and disposing of boulders \$20.00 for each cubic yard. This work was completed September 15, 1938, at a contract cost of \$19,420.66. Toward this cost a contribution of \$10,000 was made by the town of Barnstable.



~~BARNSTABLE DREDGING~~

MARASPIN CREEK AND BARNSTABLE HARBOR

Hearing was held January 27, 1938, on a petition of the Selectmen of Barnstable for dredging at Maraspin Creek.

On July 12, 1938, a contract was made with Herbert T. Gerrish to dredge to a depth of 6 feet at mean low water about 36,000 cubic yards of material in the anchorage basin and channel at Maraspin Creek and Barnstable Harbor at the following contract prices: for dredging and disposing of excavated material on marsh and flats by the hydraulic process, including the construction of necessary dikes, sluices or other barriers, 49 cents for each cubic yard of material measured in place; for removing and disposing of boulders \$20.00 for each cubic yard. This work was completed September 15, 1938, at a contract cost of \$19,420.66. Toward this cost a contribution of \$10,000 was made by the town of Barnstable.

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BARNSTABLE DREDGING

WEST BAY AND COTUIT HARBOR

Hearing was held January 27, 1938, on petition of the Selectmen for dredging at West Bay and Cotuit Harbor.

about A contract was made with the Bay State Dredging and Contracting Company on March 23, 1938, for dredging two areas in West Bay to a depth of 6 feet at mean low water, and dredging at the entrance to Cotuit Harbor a channel 100 feet wide on the bottom and 8 feet deep at mean low water, and shoal areas in Cotuit Harbor to a depth of 6 feet at mean low water. The contract prices for this work are: for dredging and disposing of the dredged material 58.5 cents per cubic yard, scow measurement; for removing and disposing of boulders \$20.00 per cubic yard. This work was completed May 19, 1938, at a contract cost of \$18,205.20. Toward this cost a contribution of \$8000.00 was made by the town.



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BARNSTABLE SHORE PROTECTION

COTUIT SHORE

A contract was made on December 2, 1937, with Frederick V. Lawrence for building about 225 linear feet of concrete sea wall and a stone jetty about 100 feet long opposite Ocean View Avenue at Cotuit, at the following contract prices: for furnishing material and building the sea wall, including excavation, back fill and all incidental work, \$8.90 for each cubic yard of concrete measured in the completed work; for furnishing and placing granite stone riprap and chips in the jetty, including all incidental works, \$3.00 for each ton of 2000 pounds in the completed work. This project was completed May 7, 1938, at a contract cost of \$3939.60. Toward this cost contributions of \$1250.00 each were made by the town and the county.

repair the sea wall at South Hyannis, at the following contract prices: for placing concrete in the sea wall \$20.00 per cubic yard; for placing stone riprap \$2.75 per ton; for furnishing and placing filling 80 cents per cubic yard. This work was completed November 3, 1938, at a contract cost of \$829.12.

## BARNSTABLE SHORE PROTECTION

### EAST BAY

Work under contract of October 27, 1937, with Harry S. Jones for building a timber fence about 150 feet long westerly of the west jetty at the entrance to East Bay was completed December 10, 1937, at a contract cost of \$494.76.

### SOUTH HYANNIS

On October 4, 1938, a letter contract was made with Louis A. Byrne for rebuilding a portion of the concrete return wall and for placing stone riprap and solid fill to repair the sea wall at South Hyannis, at the following contract prices: for placing concrete in the sea wall \$20.00 per cubic yard; for placing stone riprap \$2.75 per ton; for furnishing and placing filling 80 cents per cubic yard. This work was completed November 3, 1938, at a contract cost of \$829.12.



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~~BARNSTABLE SHORE PROTECTION~~

WEST BEACH - SQUAW ISLAND ROAD

Work under contract of October 13, 1937, with Frederick V. Lawrence for building three stone jetties with riprap returns along and easterly of Squaw Island Road, was completed December 18, 1937, at a contract cost of \$5909.57. Toward this cost contributions of \$1750.00 each were made by the town and the county.

and granite stone chips furnished and placed in the completed work, was included in a contract made October 4, 1938, with Frederick V. Lawrence for protective work along the beach shore. The work is not yet completed.

BREWSTER SHORE PROTECTION  
CALEB POND, EDGARTOWN

A petition of the Selectmen of Brewster for riprap protection along a portion of the shore in East Brewster was received by the Department in March. Toward the cost of the work contributions of \$250. each were made by the town and Essex county. channel 30 feet wide on the bottom and 100 feet below mean low water. The placing of riprap upon the bank in front of Herrington-Smith and Chapman properties in Brewster, at a contract price of \$3.73 for each ton of 2000 pounds of heavy granite stone riprap and granite stone chips furnished and placed in the completed work, was included in a contract made October 4, 1938, with Frederick V. Lawrence for protective work along the Dennis shore. The work is not yet completed.



CALEB POND, EDGARTOWN

Hearing was held January 27, 1938, on petition of the Selectmen for dredging a channel from Katama Bay to Caleb Pond.

A contract was made on May 11, 1938, with Turner and Breivogel to excavate a channel 20 feet wide on the bottom and one foot below mean low water from Katama Bay into Caleb Pond for the lump sum of \$600.00. This excavation was completed June 30, 1938 at a contract cost of \$600.00 toward which the town made a contribution of \$350.00.

The work was completed May 6, 1938 at a contract cost of \$3000.00. Toward this cost a contribution of \$1500.00 was made by the town.

CAPE POGE CHANNEL EDGARTOWN

Hearing was held January 27, 1938, on petition of the Selectmen for dredging Cape Poge Channel. On March 16, 1938, a letter contract was made with Turner and Breivogel to move and reset the northerly stone jetty and riprap to the south about 35 feet and to excavate the channel between the two jetties to a width of 50 feet on the bottom and to a depth of 6 feet at mean low water, at a contract price of the lump sum of \$2500.00. The work was completed May 6, 1938 at a contract cost of \$2500.00. Toward this cost a contribution of \$1300.00 was made by the town. A mooring post was replaced at a contract cost of \$24.00.

On June 8, 1938, a contract was made with A. E. Finney for placing crushed stone riprap along the bottom of the pier deck and against the southerly face of the pier for a distance of about 360 feet, at a contract price of \$2.24 for each ton of stone chips or broken stone in the completed work. This protection was completed July 22, 1938, at a contract cost of \$3791.36.

In June a request was received from the Selectmen of Bourne for the removal of a small building, used as an office by the engineers during the construction of the pier, from land of the town. Under a letter contract of June 14, 1938 with Howard M. Smith, the building was moved at a cost of \$80.00 to the Province Lands.

Under letter contract of July 27, 1938, with Arthur M. Pippin two flag poles on the pier and the State Seal at the end were painted at a contract cost of \$15.00.

The hurricane and flood tide of September 21, 1938, caused damage



at the pier and made CAPE COD CANAL LANDING PIER, BOURNE

worsened conditions.

The Cape Cod Canal pier authorized by Chapter 414 of the Acts of 1931, and completed in 1934, is built of solid fill construction about 600 feet long, providing a depth of 25 feet in the dock at mean low water and a light timber extension about 400 feet long as a tie up for vessels along the easterly side of the turning basin. A superstructure 36 feet wide and 200 feet long has been built of brick, steel and timber upon the pier.

Various repairs have been necessary this year. Under a letter contract of May 11, 1938, with George M. Bryne, an iron mooring post was replaced at a contract cost of \$94.00.

On June 8, 1938, a contract was made with A. K. Finney for placing crushed stone riprap along the bottom of the pier dock and against the southerly face of the pier for a distance of about 350 feet, at a contract price of \$2.24 for each ton of stone chips or broken stone in the completed work. This protection was completed July 22, 1938, at a contract cost of \$3701.38.

In June a request was received from the Selectmen of Bourne for the removal of a small building, used as an office by the engineers during the construction of the pier, from land of the town. Under a letter contract of June 14, 1938 with Howard M. Smith, the building was moved at a cost of \$80.00 to the Province Lands.

Under letter contract of July 27, 1938, with Arthur M. Pippin two flag poles on the pier and the State Seal at the end were painted at a contract cost of \$15.00.

The hurricane and flood tide of September 21, 1938, caused damage

at the pier and made the need for repairs urgent before the winter storms worsened conditions.

On October 19, 1938, a contract was made with the Barber-Colman Company to do all work necessary to repair and place in satisfactory operating condition the overhead doors at the Cape Cod Canal Pier, for the lump sum of \$566.00. This work is now near completion.

A contract was made on October 24, 1938, with John Gallo for removing two fender clusters and rebuilding them with 20 new creosoted yellow pine piles, for placing about 75 tons of heavy stone riprap, and about 400 tons of coarse gravel or crushed stone at the westerly end of the pier, for placing about 50 cubic yards of coarse gravel and about 700 cubic yards of clean sand in the existing hole in the deck of the pier and about 250 square yards of Bituminous Macadam surfacing at the westerly end of the pier. The contract prices for this work are: for each creosoted 65-foot pile furnished and driven in place \$95.00; for dismantling and rebuilding the two fender clusters, including all new material and incidental work, the lump sum of \$300.00 for two fender clusters rebuilt, complete in place; for furnishing and placing heavy stone riprap \$1.75 for each ton of 2000 pounds in the completed work; for furnishing and placing coarse gravel or crushed stone \$1.00 for each ton of 2000 pounds in the completed work; for furnishing and placing gravel and sand filling \$1.00 for each cubic yard in the completed work; for furnishing and placing Bituminous Macadam surfacing 90 cents for each square yard in the completed work. These repairs are now in progress.



Petitions From CONNECTICUT RIVER

building of three stone jetties to protect property

As a result of flood conditions and of the September hurricane the Department received urgent requests for repairs to dikes upon Connecticut River. After inspections and reports with estimates of costs by the engineers a contract was made on November 8, 1938, with the M. Mc Donough Corporation for furnishing and placing earth and clay filling and stone riprap to repair existing dikes on Connecticut River in Hatfield, Hadley, West Springfield and Chicopee at the following contract prices: for furnishing and placing earth filling in dikes, 75 cents per cubic yard, measured in place in the completed work; for furnishing and placing stone riprap in dikes, \$2.00 for each ton of 2000 pounds. This work is now in progress.

Individuals interested contributed \$200, and the County \$100.

A contract was made on November 16, 1938, with Sidney W. Lawrence for building a stone jetty at West Springfield at a contract price of \$3.51 per ton of 2000 pounds of granite stone riprap and stone chips furnished and placed by the jetty. This work is now in progress. Toward this work a contribution of \$250 has been made by owners of property and the balance by the county.

DENNIS SHORE PROTECTION.

Petitions from the Selectmen of Dennis asking for the building of three stone jetties to prevent further erosion at three locations along the Dennis shore were received

by the Department in June, 1938, on petition of the Nagsansett

Association On October 4, 1938, a contract was made with Frederick V.

Lawrence to place riprap along a portion of the East Brewster shore and to build in Dennis two stone jetties easterly of the Old Bass River Light and Ocean Drive and one jetty west of Sea Street at Dennisport, at a contract price of \$2.73 for each ton of 2000 pounds of heavy granite stone riprap and granite stone chips furnished and placed in the completed work.

These jetties are not yet completed. Toward the cost of the work at Dennisport the town made a contribution of \$600., individuals interested contributed \$300. and the County \$900.

A contract was made on November 16, 1938, with Sidney W. Lawrence for building a stone jetty at Dennisport at a contract price of \$3.21 per ton of 2000 pounds of granite stone riprap and stone chips furnished and placed in the jetty. This work is now in progress. Toward its cost a contribution of \$250 has been made by owners of property and an equal amount by the county.



FALMOUTH DREDGING

MEGANSETT HARBOR

Hearing was held January 27, 1938, on petition of the Megansett Association for dredging in Megansett Harbor.

A contract with Herbert T. Gerrish was made on August 2, 1938, for the construction of three stone jetties on the Megansett shore, at a contract price of \$14,892.01. The work was completed November 18, 1938, at a contract cost of \$14,892.01. Toward this cost a contribution of \$7,250.00 was made by the town.

The work was completed November 18, 1938, at a contract cost of \$14,892.01. Toward this cost a contribution of \$7,250.00 was made by the town. The material from the beach was carried back into Eel Pond, a tidal estuary of Megansett Bay, serving as a shoaling in the channel from the yacht club to the harbor. The conditions resulting constituted a serious menace to the maintenance of the entrance channel to Megansett Bay in which the town has carried out dredging in the channel and the construction of the jetties.

On November 8, 1938, a contract was made with Herbert T. Gerrish to dredge a basin in Eel Pond, along the openings to the harbor, and to build four stone jetties along the shore, at the following contract prices: for dredging and disposing of material in the solid fill on the beach by the hydraulic method, including the construction of all necessary dikes, sluices or other barriers, 40 cents for each cubic yard measured in place; for disposing of boulders \$20.00 per cubic yard; for closing the solid beach by the

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FALMOUTH SHORE

MENAUHANT

construction of a sand bag  
for furnishing and placing  
the jetties, including all  
Hearing was held January 27, 1938, on petition of the Selectmen  
pounds. This work, now in  
for jetties on the Menauhant shore.

On October 4, 1938 a contract was made with Frederick V. Lawrence  
made necessary by hurricanes and floods  
for the construction of three stone jetties about 200 feet long at  
Menauhant shore, at a contract price of \$2.75 for each ton of 2000  
pounds of granite stone riprap and chips furnished and placed in the  
jetties. This work is not yet completed. Toward the cost of these  
jetties contributions of \$2000.00 each have been made by the town and  
the county.

The storm of September 21, 1938, made a break in the outer beach  
at Menauhant, and eroded the whole beach so that seas at storm periods  
passed over the greater part of it. The material from the beach was  
carried back into Eel Pond, a tidal estuary of Waquoit Bay, causing a  
shoaling in the channel from the Yacht Club to an extent that precluded  
its use. The conditions resulting constituted a serious menace to the  
maintenance of the entrance channel to Waquoit Bay in which the Department  
has carried out dredging in the channel and the construction of two  
jetties.

On November 8, 1938, a contract was made with Herbert T. Gerrish  
to dredge a basin in Eel Pond, close the openings in the beach and place  
solid filling upon it, and to build four stone jetties upon the Menauhant  
shore, at the following contract prices: for dredging and disposing of  
material in the solid fill on the beach by the hydraulic process, includ-  
ing the construction of all necessary dikes, sluices or other barriers,  
40 cents for each cubic yard measured in place; for removing and disposing  
of boulders \$20.00 per cubic yard; for closing the tidal channel by the



FLOOD AND FLOOD PREVENTION

construction of a sand bag dam or other suitable barrier, \$7,500.00;  
for furnishing and placing granite stone riprap and stone chips on  
the jetties, including all incidental work, \$3.00 for each ton of 2000  
pounds. This work, now in progress, is to be done under the provisions  
of Chapter 507 of the Acts of 1938, providing funds for emergency work  
made necessary by hurricane and flood.

Under these acts certain work throughout the State is now beginning  
involving funds both for highways and waterways, under the following  
contracts:

Millers River, Annapolis, - Contract of November 22, 1938, with T. Har-  
latta Company for stream clearance, construction of walls and reconstruc-  
tion or repair of bridges and approaches.

Millers River, Erving & Montague, - Contract of November 24, 1938,  
with Kelleher Corporation for stream clearing and reconstruction of re-  
pairing bridge.

Otter River, Royalston, - Contract of November 24, 1938, with George  
M. Bryne for stream clearance and bank protection.

Millers River, Winchendon, - Contract of November 24, 1938, with  
M. Bryne for channel excavation.

Greutt Brook, Orange, - Contract of November 24, 1938, with  
Bianchi and Company Inc., for channel excavation and bank protection.

Lake Lashaway, East Brookfield, - Contract of November 24, 1938, with  
Frank J. Shields, Inc., for channel excavation and bank protection at  
the outlet.

Quabog River, Warren, - Contract of November 24, 1938, with  
J. Shields, Inc., for channel excavation and bank protection.

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## FLOOD AND HURRICANE EMERGENCY WORK

Ware River, Ware,- Contract of November 23, 1938, with V. Bartletta Company for stream clearance, construction of walls and reconstruction or repair of bridges and approaches.

At the special session of the State Legislature called in October, 1938, funds were provided by Chapters 505 and 506 of the Acts of this year, for work made necessary by flood and storm damage to town and county ways and State Highways and in rivers and streams of the Commonwealth.

Under these acts certain work throughout the State is now beginning involving funds both for highways and waterways, under the following contracts:

Millers River, Athol,- Contract of November 23, 1938, with V. Bartletta Company for stream clearance, construction of walls and reconstruction or repair of bridges and approaches.

Millers River, Erving & Montague,- Contract of November 25, 1938, with Kelleher Corporation for stream clearing and reconstruction or repairing bridge.

Otter River, Royalston,- Contract of November 29, 1938, with George M. Bryne for stream clearance and bank protection.

Millers River, Winchendon,- Contract of November 29, 1938 with George M. Bryne for channel excavation.

Orcutt Brook, Orange,- Contract of November 29, 1938, with Carlo Bianchi and Company Inc., for channel excavation and shore protection.

Lake Lashaway, East Brookfield,- Contract of November 29, 1938, with Frank J. Shields, Inc., for channel excavation and shore protection at the outlet.

Quaboag River, Warren,- Contract of November 29, 1938, with Frank J. Shields, Inc., for channel excavation and shore protection.



GLoucester Fish Pier

Ware River, Barre, - Contract of November 29, 1938, with John P. Condon Corporation for channel excavation and repairs to wing wall of dam.

Ware River, Ware, - Contract of November 30, 1938, with C & R Construction Company for channel excavation, repair of dam, shore and highway protection.

The furnishing and installing in complete working order of equipment in the Stores Building and the Cold Storage Building, under contract of August 5, 1937, with the Fritch Company, Inc., was completed September 30, 1938, at a contract cost of \$200,000.00.

The construction of the Stores Building and the Cold Storage Building by the H. S. Hauser Building Company, Inc. under contract of September 1937, was completed September 30, 1938, at a contract cost of \$1,400,000.00.

On May 25, 1938, a contract was made with R. Poppe for the reconstruction of sewer and water pipe connections to the Stores Building. This work was completed July 20, 1938, at a contract cost of \$100,000.00.

A contract with Welch and Mayhew Company was made in August 8, 1938, for road servicing, drainage and filling at the pier. This work was completed September 15, 1938, at a contract cost of \$50,000.00.

A letter contract was made on September 8, 1938, with J. H. Berglund for furnishing and placing on the Fish Pier at Gloucester two bronze tablets of the same design, each 2 feet 10 inches by 2 feet 6 inches, showing fishing boats in relief, the seal of the Corporation, with rope border, inscription and names of officials of the Corporation concerned with the project. The work, at a contract price of the work and of \$2230.00 is not yet completed.

Work for the building of this pier was begun in 1937 and was continued by the City of Gloucester between the outer end of the pier and Pound Island at the inner end of Gloucester Harbor.

## GLOUCESTER FISH PIER

The Gloucester Fish Pier was completed during the year and was dedicated by the city with appropriate exercises on October 12, 1938.

Work under contract of April 6, 1937, with the Bay State Dredging & Contracting Company for constructing the pier and dredging approaches to it, was completed March 24, 1938, at a contract cost of \$378,595.43.

The furnishing and installing in complete working order of equipment in the Stores Building and the Cold Storage Building, under contract of August 3, 1937, with the Frick Company, Inc., was completed September 30, 1938, at a contract cost of \$200,658.30.

The construction of the Stores Building and the Cold Storage Building by the H. S. Hauser Building Company, Inc. under contract of October 5, 1937, was completed September 20, 1938, at a contract cost of \$492,273.80.

On May 25, 1938, a contract was made with R. Zoppo for the construction of sewer and water pipe connections to the Stores Building. This work was completed July 20, 1938, at a contract cost of \$5801.25.

A contract with Welch and Moynihan Company was made in August 2, 1938, for road servicing, drainage and filling at the pier. This work was completed September 15, 1938, at a contract cost of \$22,640.36.

A letter contract was made on September 6, 1938, with J. F. Paramino for furnishing and placing on the Fish Pier at Gloucester two bronze tablets of the same design, each 5 feet 10 inches by 3 feet 6 inches, showing fishing boats in relief, the seal of the Commonwealth, fish, rope border, inscription and names of officials of the Commonwealth concerned with the project. The work, at a contract price of the lump sum of \$2230.00 is not yet completed.

Work for the building of this pier was begun on the site provided by the City of Gloucester between the outer end of Parker Street and Five Pound Island at the inner end of Gloucester Harbor, on April 15, 1937.



The pier ~~proper~~ itself was built with a granite and concrete wall on the northwesterly side 1065 feet long extending from Parker Street southwesterly to Five Pound Island. Outside of and extending along practically the entire length of the sea wall a pile and timber wharf of creosoted material with a concrete deck 40 feet in width was constructed. On the southwesterly side an earth dike was built between Parker Street and Five Pound Island. This dike was paved on the water side with riprap and in this location two pile and timber wharves 150 feet long and 25 feet wide were built to provide accommodations for the tying-up of fishing vessels while outfitting.

On the northeasterly side of the pier a channel 240 feet in width and 1000 feet in length was dredged to a depth of 20 feet at mean low water to provide docking space for vessels at the pile and timber platform and on the southeasterly side an approach channel was dredged 17 feet deep at mean low water to provide access for vessels to the small piers.

The material dredged was deposited hydraulically as filling between the sea wall and dike to form the solid fill portion of the pier.

Upon the pier two buildings have been built. The Cold Storage Building situated at the westerly end of the pier is a concrete and brick structure 70 feet in width, 223 feet long and four stories in height. This building has been equipped with the most modern type of refrigerating machinery for the freezing and storing of fish and for ice-making. There has been provided in this building capacity for the storage of five million pounds of fish, the daily freezing of approximately 200,000 pounds of fish and the manufacture of 50 tons of ice

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daily, and capacity is provided for the storage of 1000 tons of ice with machinery for crushing and delivery of ice to the various stores on the pier or to vessels.

The Stores Building, shoreward from the Cold Storage Building, was built consisting of eight stores with provision for further extension. This building is constructed of concrete and brick, 240 feet in length, 60 feet in width, and two stories in height. Space in this building is provided for the packing, processing and shipping of fish on the first floors and for offices and storage space on the second floors.

A macadamized roadway 70 feet in width was built on a portion of the solid fill area extending the length of the buildings and connecting with the pier. This roadway is to be extended later to connect with Parker Street.

The work on the pier including the sea wall dike, wharf platform and dredging and filling was done under contract with Bay State Dredging & Contracting Co.; the buildings were constructed under Contract with H. L. Hauser Building Company; the refrigerating machinery was installed under contract with the Frick Company; the roadway and surface drainage was constructed under contract with Welch and Moynihan Company, and sewer and water connections were built under contract with R. Zoppo.

The work on the entire project was completed on September 15, 1938 at a total cost of \$1,173,710.97, of which cost the Federal Government contributed \$522,045.64 and the Commonwealth \$651,665.33.



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GLOUCESTER SHORE

SEA WALL, WESTERN AVENUE

ALLENS HARBOR, BARNSTABLE COUNTY, MASSACHUSETTS

Requests were received in September and October from the Mayor and Park Commissioners of the city of Gloucester for repairs to the sea wall at the entrance to the Annisquam Canal just southerly of the Blynman Bridge.

A contract was made on November 22, 1938, with George M. Bryne to take down and rebuild a portion of the masonry wall near the southeasterly side of Blynman Bridge, Gloucester, at the following contract prices: for removing and rebuilding a portion of granite masonry wall, including all incidental work, the lump sum of \$2,335.00; for furnishing and placing granite stone chips, \$3.50 for each ton of 2000 pounds in the completed work. Under this contract no work has yet been done.

measured in place 38.95 cents; for removing and disposing of boulders \$8.00 per cubic yard. This work was completed August 3, 1938, at a contract cost of \$11,547.00. Toward this cost a contribution of \$6000.00 was made by the State.

HARWICH

ALLENS HARBOR, HERRING RIVER AND WITCHMERE HARBOR

Hearing was held on January 27, 1938, upon petition of the Selectmen of Harwich for dredging in Allen's Harbor and Herring River. \$4430.32. Toward this cost a contribution of \$6000.00 was made. A contract was made on May 31, 1938, with the American Hydraulic Dredging Company to dredge the entrance channels to Witchmere Harbor, Herring River and Allens Harbor to a depth of 6 feet at mean low water at the following contract prices: for dredging and disposing of the excavated material on marsh or flats by the hydraulic process, including the construction of all necessary dikes, sluices or other barriers, for each cubic yard of material measured in place 38.95 cents; for removing and disposing of boulders \$8.00 per cubic yard. This work was completed August 3, 1938, at a contract cost of \$11,217.60. Toward this cost a contribution of \$6000.00 was made by the town.



HOUSTON ~~HARWICH~~

WITCHMERE HARBOR AND HERRING RIVER

In compliance with the provisions of Chapter 10 of the City Code of 1935, the city of Houston has contributed a sum of \$1500.00 toward the cost of the work of repairing the westerly stone jetties at Witchmere Harbor and Herring River under contract of October 27, 1937 with Louis A. Byrne was completed December 14, 1937, at a contract cost of \$4439.98. Toward this cost a contribution of \$1500.00 was made by the town.

for certain construction in the east branch of the Houston River to control flood waters.

On October 4, 1938, a contract was made with the Lindholm Construction Co., Inc., for the construction and installation of flood control gates at the easterly end of the Van Dike Dam on the east branch of Houston River in Pittsfield, at prices amounting to \$19,970.00. This work is now in progress.

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## HOUSATONIC RIVER, PITTSFIELD

In compliance with the provisions of Chapter 413 of the Acts of 1935, the city of Pittsfield paid into the State Treasury its contribution of \$10,000.00, the county of Berkshire its contribution of \$2,500.00, and the Mayor and Commissioner of Public Works of the City, as authorized by vote of June 13, 1938, executed an agreement in behalf of said city assuming liability for damages for certain construction in the east branch of the Housatonic River to control flood waters.

On October 4, 1938, a contract was made with the Lindholm Construction Co., Inc., for the construction and installation of flood control gates at the easterly end of the Van Sickler dam on the east branch of Housatonic River in Pittsfield, at unit prices amounting to \$19,978.00. This work is now in progress.



## HARTT IPSWICH RIVER, IPSWICH

Hearing was held January 27, 1938, on petition of the Selectmen for dredging in Ipswich River, Ipswich.

A contract was made on July 6, 1938, with the North Atlantic Dredging Company to dredge to a depth of 6 feet at mean low water a channel 60 feet wide on the bottom in Ipswich River from Little Neck to the Town Wharf, at the following contract prices: for dredging and disposing of excavated material on marsh or flats by the hydraulic process, including the construction of necessary dikes and sluices or other barriers, 49.5 cents per cubic yard measured in place; for removing and disposing of boulders \$20.00 per cubic yard. This work was completed August 20, 1938, at a contract cost of \$19,800.00. Toward this cost a contribution of \$5000.00 was made by the town.

NANTUCKET HARBOR, NANTUCKET

The work under contract of  
Hearing was held on January 27, 1938, on petition of the  
Selectmen for dredging in Nantucket Harbor.

On July 6, 1938, a contract was made with the J. S. Packard  
Dredging Company to dredge an anchorage basin at Hussey's Shoal  
in Nantucket Harbor to a depth of 15 feet at mean low water, at  
the following contract prices: for dredging and disposing of the  
dredged material 46 cents per cubic yard, scow measurement; for  
removing and disposing of boulders \$25.00 per cubic yard. This  
work was completed July 28, 1938, at a contract cost of \$18,622.18.

Toward this cost a contribution of \$10,000.00 was made by the town.

Frank C. Taylor, was completed December 13, 1937, at a contract  
cost of \$1380.00.

The provisions of Chapter 74 of the Statutes of 1907 required  
the Department to make an investigation and study relative to the  
advisability of increasing the facilities of the State Pier at  
New Bedford by the acquisition of adjoining property of the old  
Colony Railroad Company. This report, - House No. 105 of 1908, -  
was made to the State Legislature by Report 1, 1909, showing the  
conclusion of the Department that, in order for the Department  
ment of its port facilities at New Bedford, the acquisition  
would be justified in acquiring the property of the old  
Colony Railroad Company at a price of not more than \$100,000.

Chapter 420 of the Acts of 1914, passed March 22, 1915, -  
directs the Department to buy the property of the Colony Railroad  
not exceeding \$100,000.

Negotiations for this purchase are now in progress.



## NEW BEDFORD STATE PIER

The work under contract of October 27, 1937, with Maurice M. Devine, Inc., to repair and reconstruct certain portions of the cement plaster walls and to furnish and place five window sash in the Steel Shed at the New Bedford State Pier, was completed January 29, 1938, at a contract cost of \$1995.00.

Under contract of October 27, 1937, with John F. Shea Company, Inc., for repairing and waterproofing the roof of the two-story steel shed at the pier, work was completed December 4, 1937, at a contract cost of \$678.85.

The work of furnishing, fitting and securing floating fender logs at the pier, under letter contract of November 29, 1937, with Frank C. Taylor, was completed December 15, 1937, at a contract cost of \$1330.00.

The provisions of Chapter 74 of the Resolves of 1937 required the Department to make an investigation and study relative to the advisability of increasing the facilities of the State Pier at New Bedford by the acquisition of adjoining property of the Old Colony Railroad Company. This report, - House No. 373 of 1938, - was made to the State Legislation on January 4, 1938, stating the conclusion of the Department that, to provide for future development of its port facilities at New Bedford, the Commonwealth would be justified in acquiring the adjoining property of the Old Colony Railroad Company at a price of not more than \$50,000.

Chapter 420 of the Acts of 1938, passed in June authorizes and directs the Department to buy the property in question at an amount not exceeding \$50,000.

Negotiations for this purchase are now in progress.

OAK BLUFFS SHORE

The work of repairing timber jetties extending from the sea wall along the waterfront at Oak Bluffs, under letter contract of October 25, 1937, with Turner and Breivogel was completed February 11, 1938, at a contract cost of \$1855.04.

Hearing was held January 27, 1938, on petition of the Selectmen for shore protection from the Highlands bulkhead to East Chop Light.

On July 12, 1938, a contract was made with Turner and Breivogel for furnishing and placing stone riprap and chips to protect the bank at the Highlands from the end of the riprap at the Highlands bulkhead to the existing riprap at East Chop Light, at the contract price of \$3.74 for each ton of 2000 pounds of heavy stone riprap and chips furnished in place in the completed work. This protection was completed October 21, 1938, at a contract cost of \$15,377.76. Toward this cost a contribution of \$8400.00 was made by the town.

Hearing was held January 27, 1938, on petition of the Selectmen for protection of the sea wall southerly of the Town pier.

A contract with Turner and Breivogel was made on October 18, 1938, for placing riprap in front of the Sea View Avenue wall from the stone jetty southerly of the Town Wharf for a distance of about 500 feet, at a contract price of \$3.89 for each ton of 2000 pounds of heavy stone riprap furnished and placed in the completed work. The placing of this riprap is now in progress. Toward the cost of the work a contribution of \$3000.00 was made by the town.



## By Item 574a COMMONWEALTH PROPERTY AT PLYMOUTH

\$4000.00 was made, in addition to the equal amount provided by Item 122a,

of Chapter 122. An appropriation of \$4000.00 was made this year by the Legislature for expenses of the property at Plymouth acquired by the Pilgrim Tercentenary Commission and placed under the jurisdiction of the Department by vote of the Governor and Council on July 17, 1924.

The usual care of the grounds and pier and the necessary minor repairs have been carried on during the year.

For removing and disposing of boulders, \$40.00 per cubic yard. This dredging was completed June 28, 1938, at a contract cost of \$7,990.55.

On June 21, 1938, a letter contract was made with the Bay State Dredging and Contracting Company to dredge about 2500 cubic yards of material from the shoal area between the Town Wharf and the Sklaroff Wharf to a depth of 12 feet at mean low water, at the price and under the terms and conditions of the previous contract of June 7, 1936. The work was completed June 25, 1938, at a contract cost of \$1212.00. The dredging was carried out at the request of the Selectmen and toward the cost a contribution of \$500.00 was made by the town.

The Selectmen of Provincetown at the completion of these contracts asked for further dredging in the shoal area between the Town Wharf and Sklaroff Wharf and offered a further contribution. Under a letter contract of July 13, 1938, with the Bay State Dredging and Contracting Company an additional amount of about 2500 cubic yards of material was excavated from this area, at the price and under the terms and conditions of the contract of June 7, 1936. This work was completed July 14, 1938, at a contract cost of \$1,937.15. Toward this cost a contribution of \$1000.00 was made by the town.

By item 674a of Chapter 356 of the Acts of 1938 an appropriation of \$4000.00 was made, in addition to the equal amount provided by item 693a, of Chapter 434 of the Acts of 1937, for dredging in Provincetown Harbor.

A contract was made on June 7, 1938, with the Bay State Dredging and Contracting Company to dredge an entrance and berth at the Town Wharf, the channel 65 feet wide on the bottom and 17 feet deep at mean low water and the berth 6 feet deep at mean low water, at the following contract prices: for dredging and disposing of the dredged material 65.8 for each cubic yard, scow measurement; for removing and disposing of boulders, \$20.00 per cubic yard. This dredging was completed June 25, 1938, at a contract cost of \$7,999.96.

On June 21, 1938, a letter contract was made with the Bay State Dredging and Contracting Company to dredge about 2000 cubic yards of material from the shoal area between the Town Wharf and the Sklaroff Wharf to a depth of 12 feet at mean low water, at the price and under the terms and conditions of the previous contract of June 7, 1938. The work was completed June 25, 1938, at a contract cost of \$1316.00. The dredging was carried out at the request of the Selectmen and toward the cost a contribution of \$500.00 was made by the town.

The Selectmen of Provincetown at the completion of these contracts asked for further dredging in the shoal area between the Town Wharf and Sklaroff Wharf and offered a further contribution. Under a letter contract of July 13, 1938, with the Bay State Dredging and Contracting Company an additional amount of about 2900 cubic yards of material was excavated from this area, at the price and under the terms and conditions of the contract of June 7, 1938. This work, was completed July 16, 1938, at a contract cost of \$1,937.15. Toward this cost a contribution of \$500.00 was made by the town.



PROVINCETOWN SHORE

Hearing was held January 27, 1938, on petition of the Selectmen, the Beachcombers Club, and others, for protective work along the shore of Provincetown.

On August 23, 1938, a contract was made with Louis A. Byrne, including the construction of 16 stone jetties along the shore at a contract price of \$3.24 for each ton of 2000 pounds of granite stone riprap and granite stone chips furnished and placed in the jetties. This work is now in progress. Toward the cost of this shore protection contributions of \$3250.00 each were made by the town and county.

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PROVINCETOWN TERCENTENARY COMMISSION

Roughan's Point, Nantucket.

During the year the land at Provincetown acquired by the the Acts of 1900, Provincetown Tercentenary Commission and placed under the control of the Department June 23, 1926, has been cared for from riprap wall from the balance of the funds appropriated for this area and the Province Lands. An employee has been kept at work during the summer to maintain the part in proper condition.

The Department on May 17, 1936, made a contract with Karl Fredrickson and easement in certain parcels of land on Roughan's Point, Nantucket, necessary for the additional protection.

On May 31, 1936, a contract was made with Karl Fredrickson to furnish and place about 3400 tons of stone riprap and ships at the northerly end of the existing concrete sea wall, to re-set about 35 stone steps in the stair walls in said concrete sea wall, to replace stone riprap and to place solid filling at Roughan's Point, at the following contract prices: for each ton of 2000 pounds of heavy stone riprap and stone which contained in place in the completed work \$1.40; for re-setting stone steps the sum of \$750.00; for furnishing and placing solid fill, 1000 cubic yard; for rehandling and replacing stone riprap, the sum of \$125.00. This work was completed June 17, 1936, at a contract cost of \$2625.00.



## ROUGHAN'S POINT, REVERE

An inspection made this spring of the sea wall built at

Roughan's Point, Revere, under the provisions of Chapter 358 of the Acts of 1936, showed a considerable erosion at the northerly end of the wall. It appeared, therefore, desirable to extend a riprap wall from the northerly end of the sea wall to a connection with Cherry Island Bar, using for this work the unexpended balance of the funds made available by the statute of 1936.

The Department on May 17, 1938 made a taking of the right and easement in certain parcels of land at Roughan's Point, said town has paid into the Treasury of the Commonwealth the sum of twenty-four thousand two hundred dollars, which, together with such sum, not exceeding seventy-two thousand dollars, may hereafter be appropriated by the Department for the purpose of making such fund for the improvements herein authorized; provided, that the cost of such improvement shall not exceed ninety-six thousand eight hundred dollars, and provided, further, that if any of the last mentioned sum remains after the completion of such improvements one fourth of such remainder shall be repaid to said town.

On May 31, 1938, a contract was made with Karl Fredrickson to furnish and place about 3400 tons of stone riprap and chips at the northerly end of the existing concrete sea wall, to re-set about 35 stone steps in the stair wells in said concrete sea wall, to replace stone riprap and to place solid filling at Roughan's Point, at the following contract prices: for each ton of 2000 pounds of heavy stone riprap and stone chips furnished in place in the completed work \$1.89; for re-setting stone steps the lump sum of \$750.00; for furnishing and placing solid fill, \$1.25 per cubic yard; for rehandling and replacing stone riprap, the lump sum of \$125.00. This work was completed July 27, 1938, at a contract cost of \$7353.92.

Section 2. For the purpose of meeting the payments required to be made by the town of Scituate under this act, the said town may borrow from time to time such sums as may be necessary, not exceeding, in the aggregate, twenty-four thousand two hundred dollars, and may issue notes therefor, which shall bear on their face the words, Town of Scituate, Harbor Improvements Loan, and of 1938. Such authorized issue shall constitute a separate loan, and such loans shall be paid within five years from their dates. Indebtedness incurred by said town under this act shall be in excess of the statutory limit, but

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SCITUATE HARBOR

shall, Chapter 406 of the Acts of 1938 provides for the improvement of Scituate Harbor as follows:

Section 1. Subject to the conditions herein imposed, the Department of Public Works is hereby authorized and directed to dredge certain areas in Scituate Harbor to a depth of six feet at mean low water. No work shall be begun until the town of Scituate has assumed liability, in the manner provided by section twenty-nine of chapter ninety-one of the General Laws, as appearing in the Tercentenary Edition, for all damages that may be incurred hereunder, nor until the said town has paid into the Treasury of the Commonwealth the sum of twenty-four thousand two hundred dollars, which, together with such sum, not exceeding seventy-two thousand six hundred dollars, as may hereafter be appropriated by the Commonwealth, shall constitute a fund for the improvements herein authorized; provided, that the total cost of such improvement shall not exceed ninety-six thousand eight hundred dollars, and provided, further, that if any of the last mentioned sum remains after the completion of such improvements one fourth of such remainder shall be repaid to said town.

Section 2. For the purpose of meeting the payments required to be made by the town of Scituate under this act, the said town may borrow from time to time such sums as may be necessary, not exceeding, in the aggregate, twenty-four thousand two hundred dollars, and may issue notes therefor, which shall bear on their face the words, Town of Scituate, Harbor Improvements Loan, Act of 1938. Each authorized issue shall constitute a separate loan, and such loans shall be paid within five years from their dates. Indebtedness incurred by said town under this act shall be in excess of the statutory limit, but



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shall, except as herein provided, be subject to chapter forty-four of the General Laws exclusive of the limitation contained in the first paragraph of section seven thereof.

Section 3. This act shall take full effect upon its acceptance during the current year by vote of the town of Scituate in town meeting and upon the filing during the current year in the office of the said department of a certified copy of said vote.---Approved June 9, 1938.

This Act was accepted by the town of Scituate at a town meeting held June 22, 1938, and a vote passed assuming liability for damages, as required by the terms of the statute. In August the town made the required payment of \$24,200.00 into the State Treasury.

A contract was made August 16, 1938, with the Bay State Dredging and Contracting Company to dredge to a depth of 6 feet at mean low water an anchorage basin in Scituate Harbor at the following contract prices: for dredging anchorage basin and disposing of the dredged material 49.8 cents per cubic yard, scow measurement; for removing and disposing of boulders, \$20.00 per cubic yard. This work is now in progress.

The placing of riprap was completed December 30, 1938, at a contract cost of \$1088.45.

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SCITUATE SHORE

In August and early September complaints were received from residents in the vicinity concerning the condition of the sea wall at Minot. An examination by the engineer showed the need for minor repairs to the top of the wall and to the concrete steps.

A letter contract with Frank H. Barry was made on September 27, 1938, to furnish all labor and equipment required for minor repairs to sea walls at Scituate, on the basis of actual cost plus ten per cent. The work was completed November 28, 1938, at a contract cost of \$904.42.

In October the engineer reported a settlement of the riprap in front of the sea wall at Minot to an extent that made further protection necessary before the winter storms.

On November 2, 1938, a contract was made with Karl M. Fredrickson to place heavy stone riprap in front of the concrete sea wall at Minot at a contract price of \$2.68 for each ton of 2000 pounds of heavy stone riprap furnished and placed in the completed work. The placing of riprap was completed November 18, 1938, at a contract cost of \$1098.45.



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SENGEKONTACKET POND, OAK BLUFFS

The erosive action in the channel dredged last year from Sengekontacket Pond to Nantucket Sound was increased by the tidal wave of September 21, 1938, to an extent that necessitated further protective work.

On November 2, 1938, a contract was made with Turner and Breivogel to place stone riprap along the slopes of the channel and a stone mattress under the highway bridge over Sengekontacket Channel in Oak Bluffs, at a contract price of \$3.95 for each ton of 2000 pounds of granite stone riprap furnished and placed in the completed work. This protective work is now in progress.

TRURO SHORE PROTECTION

PILGRIM BEACH

Hearing was held January 27, 1938, on petition of the Selectmen for the building of stone jetties for shore protection at Pilgrim Beach.

The work of building four stone jetties at this beach was included in a contract made August 23, 1938, with Louis A. Byrne, at a contract price of \$3.24 for each ton of 2000 pounds of granite stone riprap and granite stone chips furnished and placed in the completed jetties. The work is not yet completed. Toward the cost of these jetties a contribution of \$1000.00 each was made by the town and the county.



WARREN'S COVE, PLYMOUTH

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A contract was made in October 1938, for the repair of the sea wall built by the Commonwealth at Warren's Cove, showed that the storms had undermined and moved a section of the structure. The necessary repairs were made by Frank H. Barry under a letter contract of October 26, 1938. The work is now in progress.

\$750.00 each was made by the town and the army.

Hearing was held January 27, 1939, on a petition of the selectmen for a continuation of this billhead.

On November 20, 1938, a contract was made with the Breivogel for building a concrete tipped bulkhead along the shore long on the west side of West Avenue at Mill Harbor, at a price of \$37.00 for each linear foot of completed tipped bulkhead. Toward the cost of this work contributions of \$1000.00 each were made by the town and the army.

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WILD HARBOR, FALMOUTH

A contract was made on December 28, 1937, with Turner and Breivogel for building a creosoted timber bulkhead about 150 feet long on the west side of West Avenue at Wild Harbor at a contract price of \$19.71 for each linear foot of the completed timber bulkhead. Work under this contract was completed March 26, 1938, at a contract cost of \$2759.40. Toward this cost a contribution of \$750.00 each was made by the town and the county.

Hearing was held January 27, 1938, on a petition of the Selectmen for a continuation of this bulkhead.

On November 29, 1938, a contract was made with Turner and Breivogel for building a creosoted timber bulkhead about 144 feet long on the west side of West Avenue at Wild Harbor, at a contract price of \$27.60 for each linear foot of completed timber bulkhead. Toward the cost of this work contributions of \$1000.00 each were made by the town and the county.

posing of boulders \$20.00 for each cubic yard; for which work 10 cubic yards of heavy stone riprap and spikes furnished in place to complete work \$3.55. This work is now in progress.



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## WITCHMERE HARBOR, HARWICH

The Town of Harwich and the Department have had under consideration for some time a plan for a further development of Witchmere Harbor. The project was accepted by the Federal Government in October when the Works Progress Administration agreed to pay 45% of the completion cost which is not to exceed \$54,810.00.

On October 24, 1938, a contract was made with the Bay State Dredging and Contracting Company for building a stone jetty about 1200 feet long, the dredging of a channel 60 feet wide on the bottom, about 2100 feet long and 9 feet deep at mean low water, and the dredging of an anchorage basin about 875 feet long, 350 feet wide and 6 feet deep at mean low water, including an area 200 feet wide, 400 feet long and 9 feet deep at mean low water. The contract prices for this work are: for dredging and disposing of dredged material 56 cents per cubic yard, measured in place; for removing and disposing of boulders \$20.00 for each cubic yard; for each ton of 2000 pounds of heavy stone riprap and chips furnished in place in the completed work \$3.55. This work is now in progress.

YARMOUTH SHORE

POINT GAMMON

On August 22, 1938, a contract was made with John Gallo for the construction of ten new stone jetties, the rebuilding of 12 stone jetties, the replacing of old riprap and the placing of new riprap at Point Gammon at a contract price of \$1.90 for each ton of 2000 pounds in the completed work for furnishing and placing granite stone riprap or boulders in the jetties and for riprapping banks. This work is not yet completed. Toward the cost of the improvement a contribution of \$2000.00 has been made by the owner of property benefited by this work, and a contribution of an equal amount has been made by the County.

Fond, Kingston; Great Pond, Mill Lake Highway, Wellington West Pond, Barnstable; Three Mile or Brush Hill Pond, Whitfield; Walker Pond, Sturbridge; Wagon Pond, Carver; Whalen Lake, Leominster and Lunenburg; White Pond (Shelton); White Pond, Concord; Tupper Pond, Becket.

Surveys were made this year of the following ponds:

Bartlett Pond, Flatbush

Area at time of survey.....  
Area of natural pond.....  
Maximum depth.....  
Area of island in pond.....

Area at time of survey.....  
Natural pond.....  
Maximum depth.....  
Area of island.....  
Area of pond.....



Yokum Pond MISCELLANEOUS

Area at time of survey.....  
Area of natural GREAT PONDS  
Maximum depth.....

Jurisdiction over great ponds belonging to the Commonwealth was conferred upon the Board of Harbor and Land Commissioners by Chapter 318 of the Acts of 1888. This act applies to ponds containing in their natural state ten or more acres of land. Authority to sell and convey or lease, subject to the approval of the Governor and Council, any of the islands owned by the State in great ponds was later given by Chapter 379, Acts of 1904, now section 2, Chapter 91, General Laws.

During the year the Department has considered matters relating to: Alum Pond, Sturbridge; Baddacook Pond, Groton; Crossman's Pond, Kingston; Great Pond, Otis; Lake Winthrop, Holliston; Neck Pond, Barnstable; Three Mile or Brush Hill Pond, Sheffield; Walkers Pond, Sturbridge; Wanhams Pond, Carver; Whalom Lake, Leominster and Lunenburg; White Pond Chatham; White Pond, Concord; Yokum Pond, Becket.

Surveys were made this year of the following great ponds:

Bartletts Pond, Plymouth.

Area at time of survey.....40.50 acres  
Area of natural great pond.....40.50 acres  
Maximum depth..... 5.0 feet  
Area of islands in pond..... .61 acres

Great Lake or Big Pond, Otis.

Area at time of survey.....314.11 acres  
Natural pond area.....276.65 acres  
Maximum depth..... 29.5 feet  
Area of islands  
At time of survey..... 14.44 acres  
Area in natural pond..... 17.74 acres

Yokum Pond, Becket.

Area at time of survey.....108.5 acres  
Area of natural great pond.....108.5 acres  
Maximum depth..... 13.0 feet

During the year three hearings have been held by the Joint Board under the provisions of Chapter 463 of the Acts of 1933, upon petitions for the establishment of rights of way to great ponds belonging to the Commonwealth.

On December 2, 1937, public hearing was held upon a petition of ten citizens of the Commonwealth for the establishment of a right of way for public access to Brush Hill or Three Mile Pond in Sheffield. At the request of petitioners unable to attend on that day hearing was continued to December 29, 1937. At these two hearings all persons were given full opportunity to be heard and to present evidence.

Public hearing was held December 2, 1937, upon a petition of ten citizens of the Commonwealth for the establishment of a right of way for public access to White Pond in Concord. At this hearing all persons were given full opportunity to be heard and to present evidence.

Upon the same date public hearing was held upon a petition of ten citizens of the Commonwealth for the establishment of a right of way for public access to White Pond, Groton. All persons were given full opportunity to be heard and present evidence.

Special reports concerning these three petitions are being prepared to be presented to the incoming Legislature, as required by the statute.

On August 4, 1938, a petition of ten citizens of the Commonwealth was presented for the establishment of a right of way for public access to Yokum Pond in Becket. Public hearing was held on this petition on November 17, 1938, at Pittsfield, and full



opportunity afforded ACCESS TO GREAT PONDS

evidence. The Joint Board has been asked to consider this

matter. During the year three hearings have been held by the Joint Board under the provisions of Chapter 453 of the Acts of 1923, upon petitions for the establishment of rights of way to great ponds belonging to the Commonwealth.

On December 2, 1937, public hearing was held upon a petition of ten citizens of the Commonwealth for the establishment of a right of way for public access to Brush Hill or Three Mile Pond in Sheffield. At the request of petitioners unable to attend on that day hearing was continued to December 29, 1937. At these two hearings all persons were given full opportunity to be heard and to present evidence.

Public hearing was held December 2, 1937, upon a petition of ten citizens of the Commonwealth for the establishment of a right of way for public access to White Pond in Concord. At this hearing all persons were given full opportunity to be heard and to present evidence.

Upon the same date public hearing was held upon a petition of ten citizens of the Commonwealth for the establishment of a right of way for public access to White Pond, Chatham. All persons were given full opportunity to be heard and submit evidence.

Special reports concerning these three petitions <sup>are</sup> now being prepared to be presented to the incoming Legislature, as required by the statute.

On August 4, 1938, a petition of ten citizens of the Commonwealth was presented for the establishment of a right of way for public access to Yokum Pond in Becket. Public hearing was held on this petition on November 17, 1938, at Pittsfield, and full

opportunity afforded to all persons to be heard and to present evidence. The Joint Board has made no decision as yet in this matter.

By Chapter 470 of the Acts of 1901, the Board of Harbor and Land Commissioners was given general authority to acquire and manage lands containing about 3,500 acres in and about the Province of New Brunswick town. At that time the area was composed of lands owned by the Government and the local land carried by the water and the harbor and managing the harbor.

The work of reclaiming these lands was begun in 1901 and has been carried on ever since under the direction of the Board of Harbor and Land Commissioners and the successors to its power and duties. A superintendent at Provincetown is in immediate charge of the work.

At present the first method followed is to check the movement of sand by covering the dunes with brush which provides enough protection for the natural re-seeding of the beach grass. This work is followed by the transplanting of shrubs of which Bayberry has been found very valuable for holding the sand particularly along the slopes of the dunes. After this preparation is completed the transplanting of trees begins and the reforestation of low land. In this way about 1,200 acres of these lands have been reclaimed.

Work during the year has been continued in accordance with these methods. Brush cut and cleared from about 25 acres of dunes was used to release and protect young trees and shrubs. The brush, has been spread over the dunes to check movement of the sand and to catch and hold the seed of beach grass. Lightly shaded spruce and Austrian pine trees from the State nursery and spruce and pine trees from the nursery on the Province lands were also planted on the dunes. In addition 18,000 seedlings of spruce and pine



PROVINCE LANDS

By Chapter 470 of the Acts of 1893 the Board of Harbor and Land Commissioners was given general care and supervision of an area containing about 3,810 acres known as the Province Lands at Provincetown. At that time the area was stripped of trees, denuded of vegetation and the loose sand carried by the wind was filling ponds and menacing the harbor.

The work of reclaiming these lands was begun in 1894 and has been carried on ever since under the direction of the Board of Harbor and Land Commissioners and the successors to its powers and duties. A superintendent at Provincetown is in immediate charge of the work.

At present the first method followed is to check the movement of sand by covering the dunes with brush which provides enough protection for the natural re-seeding of the beach grass. This work is followed by the transplanting of shrubs of which bayberry has been found very valuable for holding the sand particularly along the slopes of the dunes. After this preparation is completed the transplanting of trees begins and the reforesting of the area. In this way about 1,200 acres of these lands have been reclaimed.

Work during the year has been continued in accordance with these methods. Brush cut and cleared from about  $2\frac{1}{2}$  acres of forest area to release and protect young trees and reduce the fire hazard, has been spread over the dunes to check movement of the sand and to catch and hold the seed of beach grass. Eighty thousand Scotch and Austrian pine trees from the State nursery and 15,000 native pitch pine trees from the nursery on the Province Lands have been transplanted on the dunes. In addition 15,000 native Pitch pine seedlings

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from forest areas have been transplanted to the nursery to develop a fibrous root growth before they are set out upon the dunes.

The dike at Race Run, considerably damaged by the September hurricane, has been resodded for its entire length, the sand core re-filled at two points west of the tide gate and the old gate replaced by a new one. Six hundred bayberry shrubs were transplanted from an area inside the dike to the edges of plantations where roots of planted trees have become exposed. This work has provided a shelter belt against further erosion.

The destruction of egg clusters of the gypsy moths and nests of the brown tail moths has been continued this year.

Two and a half miles additional of combined truck trail and fire stop have been built and sand piles established along these trails for use in checking surface fires. Trails previously built have been maintained.

Native berry bearing shrubs and vines taken from crowded areas have been transplanted to new locations along trails and upon the margins of two ponds where they form nesting thickets for insectivorous and song birds.

The sum of \$496.50 has been paid into the State Treasury during the year from licenses issued for cultivating and picking cranberries on the bogs, for mowing meadows and for occupying areas on these lands.



TOWN BOUNDARY LINES.

Under the provisions of Chapter 140 of the Acts of 1937 the Foxboro-Walpole town line was re-determined and four new bounds set.

The boundary line between the towns of Edgartown and Oak Bluffs through the waters of Sengekontacket Pond and Major's Cove was re-established by Chapter 265 of the Acts of 1937 and determined by setting ranges on the various corners extended.

to time in connection with the construction of highways at such prices and on such conditions as it may determine. It shall collect and collect tolls for the purpose of the formation of the commonwealth as far as it may be required for road building, the location of which it shall, in the designation on said maps, which shall be open to the inspection of officers of counties, cities and towns having the care of an adjoining public ways.

This provision has been in the statutes since the original act establishing the highway commission in 1893.

Certain boundary and coastal surveys were authorized by the Legislature in 1830; a survey of the geological resources of the Commonwealth in the same year; and topographical surveys in 1834.

Chapter 215, of the Acts of 1933 authorized the Department of Agriculture with the U.S. Geological Survey in preparing a geological map and survey and map of the Commonwealth. This act provided for an annual appropriation of \$100,000 from the State and a like amount from the Federal Government.

This act has been amended by Chapter 215 of the Acts of 1935 to provide for the preparation of a contour topographical map and a geological survey and map of the Commonwealth and also for the purchase of the necessary land for the purpose of the survey. An annual additional appropriation of \$100,000 was provided by the State and a like amount by the Federal Government.

TOPOGRAPHICAL AND GEOLOGICAL SURVEYS  
AND MAP OF MASSACHUSETTS

The General Laws of the Commonwealth, Tercentenary Edition, Ch. 81, Section 1, provide in part as follows:

"The Department of Public Works,\*\*\*\*shall prepare maps of the Commonwealth on which shall be shown county, city and town boundaries, the public ways and the state highways, with their names if practicable, and may sell such maps or other maps prepared by it from time to time in connection with the work under its charge relative to highways at such prices and on such conditions as it may determine. It shall collect and collate information relative to the geological formation of the commonwealth so far as it relates to materials suitable for road building, the location of which it shall, so far as practicable, designate on said maps, which shall be open to the inspection of officers of counties, cities and towns having the care of an authority over public ways".

This provision has been in the statutes since the original act establishing the highway commission in 1893.

Certain boundary and control surveys were authorized by the Legislature in 1830; a survey of the geological resources of the Commonwealth in the same year; and topographical surveys in 1884.

Chapter 215, of the Acts of 1933 authorized the Department to cooperate with the U. S. <sup>sub</sup> Geological Survey in preparing a contour topographical survey and map of the Commonwealth. This work is now progressing with an annual appropriation of \$50,000 from the State and a like amount from the Federal Government.

This act has been amended by Chapter 457 of the Acts of 1938 to provide for the preparation of a contour topographical survey and of a geological survey and map to determine and locate the natural resources of the commonwealth in cooperation with the U. S. <sup>sub</sup> Geological Survey. An annual additional appropriation of \$10,000 is to be made by the State and a like amount by the Federal Government.

ing areas:



After the passage of this statute conferences were held relative to its provisions and studies and field work were begun by the United States Geological Survey under the direction of S. C. Currier, Geologist.

While the public interests to be served by the work are broad enough to include a general survey of the rock formation of the Commonwealth and possible locations of ground water supply, one of the immediate interests of the Department lies in the location of materials suitable for road building. Four special geologic reports have, therefore, been made with particular reference to this matter, as follows:

1. September 9, 1938. Report with geologic map, on a two-mile segment of the line of a new highway, partly under construction, about  $2\frac{1}{2}$  miles south of Fitchburg.
2. October 3, 1938. Report on results of an examination of flood damages on major highways, especially along highway routes 2 and 20, west of Fitchburg and Springfield respectively.
- 3 and 4. November 30, 1938. Two reports with geologic maps, covering segments of projected highways between the Billerica Town line and the State line at Tyngsboro and between West Concord and Westminster. These reports describe the character of surficial materials and bedrock that will be encountered in highway construction along the proposed lines. The areal distribution of all sand, gravel and till deposits and of bedrock exposures is shown by distinctive colors on the maps.

A brief general account of the geology of Cape Cod is now in preparation.

Geologic mapping has begun already and is to be resumed as soon as weather conditions permit and personnel becomes available, in the following areas:

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(1) Lowell (15-minute) quadrangle.--The area mapped along the previously noted highway segment between Billerica town line and the State line at Tyngsboro<sup>o</sup> is 1 to 2 miles wide and approximately 12 miles long, and lies wholly in the Lowell quadrangle. As the large area of Chelmsford granite which also is within this quadrangle had already been studied in 1936 it was decided to complete the mapping of this area as one of the first units of the program. About one-third of the quadrangle is now mapped. An interesting and somewhat complicated glacial history is revealed by the data obtained so far, and solution of the problem for this quadrangle will have considerable bearing upon the interpretation of geologic features in all adjacent areas.

Besides an important area of granite the Lowell quadrangle contains extensive deposits of excellent sands and gravels. From an engineering point of view, also, information to be obtained regarding the thickness and distribution of the deposits of various unconsolidated glacial materials that occur in the area, the courses and depths of pre-glacial valleys, partly or completely buried by these deposits, and the general relations of the bedrock surface to the present physiographic features will have much practical value.

(2) Norwood (7 1/2-minute) quadrangle.--The Norwood quadrangle was chosen for early study at the request of the Department because of tentative plans for the construction of a major highway across the quadrangle. Thus far, outcrops of bedrock in the Norwood quadrangle (northwest quarter of the Dedham 15-minute quadrangle) have been mapped, and it is planned to complete the mapping of the surficial deposits as soon as possible. It is expected that field work in the quadrangle will be completed during the coming season.



(3) Blue Hill (7 1/2-minute) quadrangle.--The Blue Hill quadrangle was chosen also for early study because of the tentative plans for major highway construction. It forms the northeast quarter of the Dedham 15-minute quadrangle. Besides its immediate interest to the Department in relation to studies for highways, it is of general geologic interest because it contains the greater part of the Blue Hill range, and has large deposits of glacial sands and gravels that not only possess some economic value but also indicate a somewhat complicated glacial and post-glacial history. About one-quarter of the quadrangle has been mapped.

(4) Belchertown (15-minute) quadrangle.--Geologic mapping of the Belchertown quadrangle has been confined chiefly to valleys of the several branches of Swift River that are soon to be flooded by the filling of the Quabbin reservoir. Geologic work within the limits of the reservoir is nearly completed. Next will be mapped the adjacent quadrangles to the north (Millers Falls, 7 1/2 minute, and Mt. Grace, 7 1/2-minute) for which the new, and larger scaled, base maps are now available. Mapping in the Belchertown quadrangle outside the reservoir area will probably be suspended until new base maps for this quadrangle are available.

RR-21  
 CONSERVING AND EQUALIZING THE FLOW OF WATER  
 IN RIVERS AND STREAMS

By Chapter 359, Acts of 1909, Chapter 564, Acts of 1912, and Chapter 84, Resolves of 1917, co-operation was established between the Commonwealth and the Water Resources Branch of the United States Geological Survey, so that results of work relating to the gauging of streams within the Commonwealth and other work of a similar character carried on by said survey have been obtained for use by the Department and are available for other Departments of the Commonwealth. Toward the cost of this work the Department has paid during the year \$5,000.00. In conjunction with WPA for the following projects:

Project 118.

Nineteen and two-tenths miles of second order traverse has been run along the shore of Nantucket Sound from Point German to Chatham in which 38 stations were permanently marked. Along this traverse 76 Land Court bounds were located, entailing additional traverse of 6.7 miles.

Project 124.

This project was run in the Agawam and Wrentham districts of the town of Barnstable, amounting to 13.0 miles of traverse with 19 stations permanently connected. Along the line of traverse 23 Land Court bounds were located, entailing an additional 4.1 miles of traverse.



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## RE-ESTABLISHMENT OF CERTAIN TRIANGULATION STATIONS

By section 33, Chapter 91 of the General Laws, the Department is authorized to make such surveys and to do such other work as may be required by any order of the Land Court, to re-establish and permanently mark certain triangulation points and stations previously established in connection with the topographical survey of the Commonwealth, and the town boundary survey, which have been lost or destroyed and to obtain the geographical position of such new points and stations as may be required from time to time by the Court.

During the year the appropriation for this purpose has been used in conjunction with WPA for the following projects:

### Project 116.

Nineteen and two-tenths miles of second order traverse has been run along the shore of Nantucket Sound from Point Gammon to Chatham in which 38 stations were permanently marked. Along this traverse 76 LandCourt bounds were located, entailing additional traverse of 6.7 miles.

### Project 124.

This project was run in the Hyannis and Wianno district of the town of Barnstable, amounting to 13.2 miles of traverse with 19 stations permanently monumented. Along the line of traverse 48 Land Court bounds were located, entailing an additional 3.1 miles of traverse.

## MARINE BORERS

During the year the Department in co-operation with the New England Marine Piling Investigation Committee has maintained test boards at various locations in the State to determine the type and extent of damage caused by the various kinds of marine borers. This work has now been in progress for several years and clearly indicates that the activities of the borers are increasing and the range of their depredations extending over larger areas. It is apparent that in the tide waters of the Commonwealth no permanent structures should be built of untreated wood.



## LICENSES AND PERMITS

During the year 109 licenses were granted for work to be done in tide waters, great ponds, Connecticut River and Merrimac River, and 98 permits for miscellaneous purposes. The Department also approved 78 permits granted by cities and towns for the construction and maintenance of fish weirs in tide water.

# FEDERAL APPROPRIATIONS AND EXPENDITURES

Federal appropriations and expenditures for the improvement of rivers and harbors in Massachusetts from the establishment of the Government to the close of the fiscal year ending June 30, 1938, are shown in the following tables furnished by the Chief of Engineers, U. S. Army:-

TABLE NO. 1-Localities at which work was done during Fiscal Year 1938

Locality	Expenditures	Appropriations
Newburyport Harbor	\$ 706,751.13	\$ 717,708.13
Mystic River	868,884.84	868,884.84
Boston Harbor	15,891,047.63	16,841,058.72(1)
Weymouth Fore River	929,544.51	929,544.51
Cape Cod Canal	33,235,425.95	34,738,761.51
Pollock Rip Shoals, Nantucket Sound	1,579,176.34	1,629,176.34
Cross Rip Shoals, Nantucket Sound	52,437.20	52,437.20
New Bedford and Fairhaven Harbors	1,816,517.14	1,947,383.05
Fall River Harbor	808,149.49	808,149.49
Total	\$55,887,934.23	\$ 58,533,105.79

(1) Exclusive of \$100,000 contributed funds.

TABLE NO. 2-Localities at which work is not now in progress

Locality	Expenditures	Appropriations
Gloucester Harbor and Annisquam River	\$ 593,147.44	\$ 593,147.44
Chatham Harbor	31,571.36	31,571.36
Harbor of Refuge at Nantucket	773,965.53	773,965.53
Hyannis Harbor	224,450.36	224,450.36
Vineyard Haven Harbor	82,573.47	82,573.47
Lynn Harbor	814,750.77	814,750.77
Plymouth Harbor	511,253.36	511,253.36(1)
Taunton River	383,838.10	383,838.10
Marrinack River	404,466.72	404,466.72
Malden River	149,950.00	149,950.00(2)
Sandy Bay, Cape Ann, Harbor of Refuge	1,941,478.00	1,941,478.00
Bass River	20,150.41	20,150.41
Buzzards Bay Harbor (Wespecket Rock)	2,500.00	2,500.00
Canapisset Channel	9,112.54	9,112.54
Cohasset Harbor	10,000.00	10,000.00



<u>Locality</u>	<u>Expenditures</u>	<u>Appropriations</u>
Dunbury Harbor	\$ 37,000.00	\$ 37,000.00
Edgartown Harbor (Marthas Vineyard)	30,000.00	30,000.00
Essex River	30,000.00	30,000.00
Hingham Harbor	38,316.58	38,316.58
Ipswich River	5,617.91	5,617.91
Kingston Harbor	8,940.09	8,940.09
Little Harbor, Woods Hole	18,000.00	18,000.00
Manchester Harbor	23,985.57	23,985.57
Marblehead Harbor	584.00	584.00
Powow River	50,940.72	50,940.72
Rockport Harbor	91,229.25	91,229.25
Town River	37,577.41	37,577.41
Wareham Harbor	95,997.30	95,997.30
Wellfleet Harbor	11,365.57	11,365.57
Westport Harbor and River	3,000.00	3,000.00
Winthrop Harbor	9,000.00	9,000.00
Woods Hole Channel	343,599.92	343,599.92
Beverly Harbor	246,690.41	246,690.41(3)
Salem Harbor	107,956.57	107,956.57
Dorchester Bay and Naponset River	128,176.44	128,176.44
Weymouth Back River	27,000.00	27,000.00
Scituate Harbor	126,590.98	126,590.98
Provincetown Harbor	348,062.72	348,062.72
Total	\$ 7,772,839.50	\$ 7,772,839.50

- (1) Exclusive of \$108,400 contributed funds.
- (2) Exclusive of \$ 62,000 contributed funds.
- (3) Exclusive of \$100,000 contributed funds.

#### Recapitulation

	<u>Expenditures</u>	<u>Appropriations</u>
Total of Table No. 1	\$55,887,934.23	\$58,533,105.79
Total of Table No. 2	<u>7,772,839.50</u>	<u>7,772,839.50</u>
Total	\$63,660,773.73	\$66,305,945.29



CONTRACTS MADE BY THE DEPARTMENT OF PUBLIC WORKS AND IN FORCE DURING THE YEAR ENDING NOVEMBER 30, 1938  
 DIVISION OF WATERWAYS, UNDER PROVISIONS OF CHAPTER 407, ACTS OF 1938, EFFECTIVE SEPTEMBER 7, 1938

Contract No.	Work	Contractor	Date	Date of Completion	Contract price
485	Gloucester Fish Pier - construction and dredging of approaches	Bay State Dredging and Contracting Company	April 6, 1937	March 24, 1938	For removal and disposal of existing structures the lump sum of \$9,500. For dredging and disposing of material outside site of work, 28 cents per cubic yard, scow measurement. For dredging and disposing of material in areas to be filled, 20 cents per cubic yard, scow measurement. For removing boulders \$5.00 per cubic yard. For removing ledge \$35. per cubic yard, place measurement. For building pier - unit prices.
493	East Bay, Barnstable - timber fence westerly of west jetty	Harry L. Jones	October 27, 1937	Dec. 10, 1937	For building timber fence 150 feet long, including all material, the furnishing of all plant, tools, labor and equipment and incidental work, the lump sum of \$494.76.
495	Gloucester Fish Pier - furnishing and installing equipment in the Stores Building and the Cold Storage Building	Frick Company	Aug. 3, 1937	Sept. 30, 1938	For furnishing and installing in complete working order in the Stores Building and the Cold Storage Building at the Gloucester Fish Pier, the entire equipment required by specifications and plans, including all incidental work, the lump sum of \$207,186.00.
509	Gloucester Fish Pier - Stores Building and Cold Storage Building	H.L. Hauser Building Co., Inc.	Oct. 5, 1937	Sept. 20, 1938	For furnishing materials and erecting complete on place the Stores Building above the piles and the Cold Storage Building above elevation 8, with appurtenant structures and equipment, the lump sum of \$439,704. for excavation, foundations, steel concrete piles, etc., unit prices.
510	Barnstable - stone jetties at Squaw Island Road	Frederick V. Lawrence	Oct. 13, 1937	Dec. 18, 1937	For furnishing and placing granite stone riprap and chips in jetties and returns, including all incidental work, \$2.70 for each ton of 2000 lbs. in the completed work
512	Malden River, Malden - dredging channel	North Atlantic Dredging Company	Oct. 26, 1937	Dec. 15, 1937	For dredging and disposing of dredged material on shore 45 cents for each cubic yard measured in situ. For removing and disposing of boulders \$20. for each cubic yard.
513	New Bedford State Pier - repairs to walls and windows	Maurice M. Devine, Inc.	Oct. 27, 1937	Jan. 29, 1938	For removing existing plaster and applying gunite, the lump sum of \$1,100. For removing existing plaster and applying gunite to certain portions of wall as directed by Engineer, 40 cents per square foot of wall surface. For applying flash coat of gunite to other portions of wall, 30 cents per square foot of surface. For removing five old window sash and furnishing and installing five new window sash, the lump sum of \$275.
514	New Bedford State Pier - repairs to roof of steel shed	John F. Shea Company, Inc.	Oct. 27, 1937	Dec. 4, 1937	For each square foot of 5-ply tar and gravel roofing furnished and placed, including all labor, materials and incidental work, 11 cents per square foot. For replacing old planks with new, including all labor material and fastenings, 10 cents per square foot. For each square foot of copper furnished and placed, 50 cents per square foot.
515	Witchmere Harbor and Herring River, Harwich - repairs to stone jetties.	Louis A. Byrne	Oct. 27, 1937	Dec. 14, 1937	For furnishing and placing broken stone in the jetties, including all incidental work, \$3.70 for each ton of 2000 lbs. in the completed work. For each cubic yard of material excavated and back filled in the completed work, including all incidental work, 80 cents per cubic yard.



CONTRACTS MADE BY THE DEPARTMENT OF PUBLIC WORKS AND IN FORCE DURING THE YEAR ENDING

November 30, 1938

Contract No.	Work	Contractor	Date	Date of Completion	Contract price
516	Commonwealth Pier 5 - resurfacing portions of floors	Warren Bros. Roads Co.	Nov. 2, 1937	Dec. 31, 1937	Unit prices.
517	Not used. Letter contract made.				
518	Barnstable - Cotuit shore protection	Frederick V. Lawrence	Dec. 2, 1937	May 7, 1938.	For furnishing material and building concrete sea wall, including excavation, back fill and all incidental work, \$8.90 for each cubic yard of concrete measured in the completed work. For furnishing and placing granite stone riprap and chips in the jetty, including all incidental work, \$3.00 for each ton of 2000 lbs. in the completed work.
519	Wild Harbor, Falmouth - timber bulkhead	Turner and Breivogel	Dec. 28, 1937	Mar. 26, 1938	For furnishing all materials labor and equipment and all incidental work \$19.71 for each linear foot of completed timber bulkhead.
520	Commonwealth Pier 5, and E Street Storehouse, South Boston and Commonwealth Pier 1, East Boston repairs and extensions to sprinkler systems.	Fred L. Douglass	Feb. 8, 1938		For furnishing Journeymen sprinkler fitters, \$1.49 per hour for each fitter, including use of equipment, tools, etc. For furnishing Sprinkler Fitters classed as Helpers, 89 cents each per hour. For furnishing materials, actual cost plus 15%.
521	Commonwealth Piers 1 and 5 - repairs to doors.	Austin McDonald	Feb. 8, 1938		For furnishing sheet metal workers, \$1.54 each per hour during regular working hours. For furnishing carpenters, \$1.54 each per hour during regular working hours. For furnishing painters \$1.50 each per hour during regular working hours. For furnishing materials the actual cost plus 15%.
522	Commonwealth Pier 5, South Boston and Commonwealth Pier 1, East Boston - repairs to passenger gangways and floating fender logs and fittings.	Austin McDonald	Feb. 8, 1938	Nov. 30, 1938	For furnishing carpenters \$1.60 each per hour during regular working hours. For furnishing pile drivers \$1.54 each per hour during regular working hours. For furnishing hoisting engineers \$1.37 1/2 each per hour during regular working hours. For furnishing Assistant Engineers, \$1.10 per engineer per hour during regular working hours. For furnishing iron workers \$1.50 per worker per hour during regular working hours. For furnishing common laborers \$1.05 per laborer per hour during regular working hours. For furnishing materials the actual cost plus 15%.
523	Commonwealth Pier 5, South Boston - repairs to elevators	William R. Timpany Company	Feb. 8, 1938	Nov. 30, 1938	For furnishing elevator workers classed as Journeymen, \$1.90 each per hour during regular working hours. For furnishing elevator workers classed as Helpers \$1.60 each per hour during regular working hours. For furnishing materials, actual cost plus 15%.
524	West Bay and Cotuit Harbor - Dredging	Bay State Dredging and Contracting Company	Mar. 23, 1938	May 19, 1938	For dredging and disposing of dredged material 58.5 cents per cubic yard, scow measurement. For removing and disposing of boulders \$20. per cubic yard.



CONTRACTS MADE BY THE DEPARTMENT OF PUBLIC WORKS AND IN FORCE DURING THE YEAR ENDING

November 30, 1938

Contract No.	Work	Contractor	Date	Date of Completion	Contract Price
525	Gloucester Fish Pier, - sewer and water pipe connections to Stores Buildings	R. Zoppo	May 25, 1938	July 20, 1938	Unit prices.
526	Caleb's Pond, Edgartown, - dredging channel	Turner & Breivogel	May 11, 1938	June 30, 1938	For excavating and disposing of excavated material and all incidental work, the lump sum of \$600.
527	Roughan's Point, Revere, - riprap wall and stone steps	Karl Fredrickson	May 31, 1938	July 27, 1938	For each ton of 2,000 pounds of heavy stone riprap and stone chips furnished in place in completed work \$1.89. For resetting stone steps the lump sum of \$750. For furnishing and placing solid fill \$1.25 for each cubic yard. For rehandling and replacing stone riprap the lump sum of \$125.
528	Allen's Harbor, Herring River Witchmere Harbor, Harwich	American Hydraulic Dredging Co.	May 31, 1938	Aug. 13, 1938	For dredging and disposing of the excavated material on marsh or flats by the hydraulic process, including the construction of all necessary dikes, sluices or other barriers, for each cubic yard of material measured in place, 38.95 cents. For removing and disposing of all boulders \$8. per cubic yard.
529	Provincetown Harbor, - dredging	Bay State Dredging and Contracting Co.	June 7, 1938	June 25, 1938	For dredging and disposing of dredged material 65.8 cents per cubic yard, scow measurement. For removing and disposing of all boulders \$20. per cubic yard.
530	Jeffries Point, East Boston - dredging	Bay State Dredging and Contracting Co.	June 8, 1938	Aug. 1, 1938	For dredging and disposing of dredged material 59.5 cents per cubic yard, scow measurement. For removing and disposing of all boulders \$20. per cubic yard.
531	Cape Cod Canal Pier, Bourne, - placing crushed stone riprap.	A. K. Finney	June 8, 1938	July 22, 1938	For furnishing and placing stone chips or crushed stone \$2.24 for each ton of 2000 lbs. in the completed work.
532	Megansett Harbor, - Falmouth, - dredging	Herbert T. Gerrish	Aug. 2, 1938		For dredging and disposing of excavated material on marsh and flats by hydraulic process, including construction of all necessary dikes, sluices or other barriers, 32.4 cents per cubic yard, measured in place. For removing and disposing of boulders \$20. per cubic yard.
533	Hyannis-port Harbor, Barnstable, - removal of boulders	James B. Rendle Co.	June 21, 1938	July 30, 1938	For removing and disposing of boulders \$10 per cubic yard.
534	Yarmouth Shore protection, - Point Gammon	John Gallo	Aug. 22, 1938	<del>Mar. 11, 1939</del>	For furnishing and placing granite stone riprap or boulders in the jetties, and for riprapping banks, including all incidental work, the sum of \$1.90 for each ton of 2000 lbs. in the completed work.



CONTRACTS MADE BY THE DEPARTMENT OF PUBLIC WORKS AND IN FORCE DURING THE YEAR ENDING

November 30, 1938

Contract No.	Work	Contractor	Date	Date of Completion	Contract Price
535	Maraspin Creek and Barnstable Harbor,- Dredging.	Herbert T. Gerrish	July 12, 1938	Sept. 15, 1938	For dredging and disposing of excavated material on marsh and flats by hydraulic process, including the construction of necessary dikes, sluices or other barriers, 49 cents per cubic yard measured in place. For removing and disposing of all boulders, \$20. per cubic yard.
536	Highlands, Oak Bluffs,- shore protection.	Turner and Breivogel	July 12, 1938	Oct. 21, 1938	For each ton of heavy stone riprap and stone chips furnished in place in the completed work, including all incidental work, \$3.74 for each ton of 2000 pounds.
537	Neponset River, Boston and Milton,- dredging	Herbert T. Gerrish	July 6, 1938	Sept. 8, 1938	For dredging and disposing of the dredged material on shore, 46 cents for each cubic yard measured <b>in situ</b> . For removing and disposing of all boulders \$20. for each cubic yard.
538	Ipswich River,- dredging	North Atlantic Dredging Company	July 6, 1938	Aug. 20, 1938	For dredging and disposing of excavated material on marsh or flats by the hydraulic process, including the construction of necessary dikes and sluices or other barriers, 49.5 cents for each cubic yard measured in place. For removing and disposing of boulders \$20. for each cubic yard.
539	Nantucket Harbor,- dredging	J. S. Packard Dredging Company	July 6, 1938	July 28, 1938	For dredging and disposing of dredged material 46 cents per cubic yard, scow measurement. For removing and disposing of boulders \$25. per cubic yard.
540	Gloucester Fish Pier,- road surfacing, drainage and filling.	Welch and Moynihan Company	Aug. 2, 1938	Sept. 15, 1938	Unit prices.
541	Scituate Harbor,- dredging anchorage basin	Bay State Dredging and Contracting Co.	Aug. 16, 1938		For dredging anchorage basin and disposing of the dredged material <u>49.8 cents</u> per cubic yard, scow measurement. For removing and disposing of boulders \$20. per cubic yard.
542	Weir River, Hull and Hingham,- dredging	J. S. Packard Dredging Co.	Aug. 3, 1938	Sept. 28, 1938	For dredging and disposing of the dredged material 45 cents for each cubic yard, scow measurement. For removing and disposing of boulders, \$50. per cubic yard.
543	Provincetown Shore and Truro Shore,- stone jetties.	Louis A. Byrne	Aug. 23, 1938		For furnishing and placing granite stone riprap and granite stone chips in jetties, including all incidental work, \$3.24 for each ton of 2000 lbs. in the completed work.
544	Witchmere Harbor, Harwich jetty construction and dredging.	Bay State Dredging and Construction Co.	Oct. 24, 1938		For dredging and disposing of excavated material 56 cents per cubic yard. For removing and disposing of boulders \$20. per cubic yard. For each ton of 2000 lbs. of heavy stone riprap and chips furnished in place in completed work \$3.55.
545	Commonwealth Pier 5, baggage conveyor	Norfolk Iron Works <sup>Company</sup>	Aug. 24, 1938	Oct. 28, 1938	For furnishing all labor, materials, tools and equipment and performing all work necessary to construct and install an electrically operated baggage conveyor, with accessory floor opening and penthouse extending from first floor to second floor of Commonwealth Pier 5, for the lump sum of \$3193.



CONTRACTS MADE BY THE DEPARTMENT OF PUBLIC WORKS AND IN FORCE DURING THE YEAR ENDING

November 30, 1938

Contract No.	Work	Contractor	Date	Date of Completion	Contract price
546	Dennis and Brewster,-Shore protection,-riprap at Brewster Shore 2 stone jetties easterly of Bass Light, Dennis, and one jetty west of Sea Street, Dennis	Frederick V. Lawrence	Oct. 4, 1938		For furnishing and placing heavy granite stone riprap and granite stone chips \$2.73 per ton of 2000 pounds in the completed work.
547	Wild Harbor, Falmouth,-timber bulkhead	Turner and Breivogel	Nov. 29, 1938		For furnishing all materials, labor and equipment and all incidental work, including an anchorage and incidental work, \$27.60 for each linear foot of completed bulkhead.
548	Housatonic River,-flood control gates at Van Sickler dam, Pittsfield	Lindholm Construction Company	Oct. 4, 1938		For furnishing and installing 2 cast iron sluice gates including motor and hand mechanism, \$5000. Other work at unit prices.
549	Menauhant Shore, Falmouth,-stone jetties	Frederick V. Lawrence	Oct. 4, 1938		For furnishing and placing granite stone riprap and chips in the jetties \$2.75 per ton of 2000 pounds.
550	Oak Bluffs,-riprap in front of sea wall at Sea View Avenue	Turner and Breivogel	Oct. 18, 1938		For furnishing and placing heavy granite stone riprap \$3.89 for each ton of 2000 pounds in the completed work.
551	Hingham Harbor, Crow Point,-dredging and building pipe drain and manhole.	Bay State Dredging and Contracting Company	Nov. 1, 1938		For dredging and disposing of dredged material 76 cents for each cubic yard, measured in place. For removing and disposing of boulders \$20. per cubic yard. For furnishing labor and materials and building one manhole \$350. For remaining work unit prices.
552	Commonwealth Pier 5 and E Street Storehouse, - repairs	Chandler Construction Company	Oct. 19, 1938		For repairs to roofs, skylights, ventilators, flashing and downspouts, etc. unit prices.
553	Dennis,-stone jetty at Dennis-port	Sidney W. Lawrence	Nov. 16, 1938		For furnishing and placing granite stone riprap and stone chips in the jetty \$3.21 for each ton of 2000 pounds.
554	Scituate Shore,-riprap in front of Minot Sea wall at North Scituate	Karl M. Fredrickson	Nov. 2, 1938	Nov. 18, 1938	For furnishing and placing heavy stone riprap in the work \$2.68 for each ton of 2000 lbs. in the completed work
555	Sengekontacket Channel, Oak Bluffs,-stone riprap	Turner and Breivogel	Nov. 2, 1938		For furnishing and placing granite stone riprap including all incidental work \$3.95 per ton.
557	Pemberton Point, Hull,-repairs to sea wall	Karl M. Fredrickson	Nov. 16, 1938		For furnishing and placing granite stone riprap and chips in the jetties, \$2.58 for each ton of 2,000 pounds in the completed work. For furnishing and placing granite stone riprap and chips along face of sea wall \$2.48 for each ton of 2000 pounds in the completed work. For removing existing riprap and replacing it in the completed work, \$1.00 for each ton of 2,000 pounds replaced in the completed work.
564	Gloucester,-repairs to masonry wall at Western Avenue	George M. Bryne	Nov. 22, 1938		For removing and rebuilding a portion of granite masonry wall, including all incidental work, labor and equipment, the lump sum of \$2,335. For furnishing and placing granite stone chips \$3.50 for each ton of 2,000 lbs. in completed work.



CONTRACTS MADE BY THE DEPARTMENT OF PUBLIC WORKS AND IN FORCE DURING THE YEAR ENDING

November 30, 1938

Contract No.	Work	Contractor	Date	Date of Completion	Contract price
565 H & W 565A 565B	Millers River, Athol,- flood protection Supplementary agreement with contractor.	V. Barletta Company	Nov. 23, 1938		Unit prices.
566	Menamsha Creek, Chilmark and Gay Head,-Dredging, earth dike and riprap	Bay State Dredging and Contracting Company	Oct. 26, 1938		For furnishing and placing stone riprap \$8.00 per cubic yard in completed work. For furnishing and placing sand in earth dike 85 cents per cubic yard in completed work. For furnishing and placing gravel in dike, \$2.00 per cubic yard in completed work. For dredging and disposing of dredged material 65 cents per cubic yard, scow measurement.
567	Menauhant Shore, Falmouth, dredging, solid filling and stone jetties	Herbert T. Gerrish	Nov. 8, 1938		For dredging and disposing of excavated material in solid fill on beach by hydraulic process 40 cents per cubic yard. For removing and disposing of boulders \$20. per cubic yard. For closing tidal channel by construction of a sand bag dam or other suitable barrier, \$7,500. For furnishing and placing granite stone riprap and chips in the jetties, \$3.00 for each ton of 2000 pounds.
568	Connecticut River,- Hatfield, Hadley, West Springfield and Chicopee,-repairing dikes.	M. McDonough Corporation	Nov. 8, 1938		For furnishing and placing earth filling in dikes 75 cents per cubic yard, measured in place in completed work. For furnishing and placing stone riprap in dikes \$2.00 for each ton of 2000 pounds.
570 H & W	Millers River, Erving and Montague,-flood control	Kelleher Corporation	Nov. 25, 1938		Unit prices.
571 H & W	Ware River, Ware,-flood control	C & R Construction Company	Nov. 30, 1938		Unit prices.
572	Cape Cod Canal Pier,-repairing damage to overhead doors.	Barber-Coleman Company	Oct. 19, 1938		For all work necessary to repair and place in satisfactory operating condition the overhead doors at Cape Cod Canal Pier, the lump sum of \$566.
573 H & W	Otter River, Royalston,-flood control	George M. Bryne	Nov. 29, 1938		Unit prices.
574 H & W	Lake Lashaway, East Brookfield,-emergency flood work.	Frank J. Shields, Inc.	Nov. 29, 1938		Unit prices.
575 H & W	Quaboag River, Warren,-emergency flood control	Frank J. Shields, Inc.	Nov. 29, 1938		Unit prices.
577 H & W	Ware River, Barre,-flood control	John P. Condon Corporation	Nov. 29, 1938		Unit prices.
579 H & W	Millers River, Winchendon flood control	George M. Bryne	Nov. 29, 1938		Unit prices.
585	Cape Cod Canal Pier, Bourne,-repairs	John Gallo	Oct. 24, 1938		Unit prices.



# I N D E X

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license charges (for tide-water displacement and copying Commonwealth tide lands)outside of Boston Harbor. . . . .

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sale of Atlas sheets and miscellaneous plans. . . . .

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sale of New Bedford State Pier. . . . .

sale of Cape Cod Canal Pier . . . . .

sale of Maps . . . . .

sale of Plymouth State Pier. . . . .



P.D. 524 for 1438-  
rep. Beg. 1193

uncomplete 5 sheets only

shd

"waterways" sheet

missing

FINANCIAL STATEMENT  
Summary of Income, Year Ending November 30, 1938

Highway Fund

Section 34, Chapter 90, General Laws, as amended  
(See Chapter 288, Acts of 1925)

Fees (for registration of motor vehicles, licenses to operate, etc.), and fines (penalties, Sundry Courts), net receipts. . . . .	6,768,485.93	
Gasoline Tax, net . . . . .	21,601,851.09	
Contributions for highways and assessments (G.L.Ch.81) . . . . .	35,911.79	
Appropriation balances of previous years reverting . . . . .	100,949.43	
Contributions and Refunds . . . . .	2,468.48	
Sale of old materials and buildings . . . . .	1,957.18	
Reimbursement for repairs to guard rail and other property. . . . .	8,118.64	
Rent of property (Nursery) . . . . .	180.00	
Rent of Space, Public Works Building . . . . .	42,644.05	
Slot Machine Receipts . . . . .	214.90	
Accrued Interest on Bonds issued . . . . .	4,156.25	
Premium . . . . .	27,345.75	
Boulevard Receipts Highway Fund share . . . . .	773.05	\$28,595,056.54

Port of Boston Fund  
(Chapter 91, General Laws)

Rents (leases and permits) . . . . .	142,817.28	
Reimbursement for services (inspection of dumping dredged material in Boston Harbor) . . . . .	1,015.40	
Use of Commonwealth Pier 5 (wharfage, dockage, rentals, etc.) . . . . .	157,929.95	
Use of Commonwealth Pier 1 (rentals, etc.) . . . . .	3,339.04	
Revenue from permits for dumping dredged material at receiving Basins . . . . .	1,910.40	
License charges (for tidewater displacement and occupying Commonwealth tide lands (Boston Harbor) . . . . .	4,313.00	
Telephone Pay Station receipts . . . . .	292.56	
Sale of land . . . . .	36,400.00	
Refunds . . . . .	26.13	
Appropriation balances of previous years reverting . . . . .	3,549.68	351,593.44

Department Income  
(Ordinary Revenue)

Sales (specifications and plans for contracts) . . . . .	1,347.00	
License charges (for tidewater displacement and occupying Commonwealth tide lands) outside of Boston Harbor . . . . .	3,013.98	
Certified Copying charges . . . . .	127.00	
Sale of Atlas sheets and miscellaneous plans . . . . .	1,059.84	
Use of Province Lands (S.25, c.91, G.L.) . . . . .	496.50	
Permits for advertising signs . . . . .	27,251.26	
Use of New Bedford State Pier . . . . .	17,102.43	
Use of Cape Cod Canal Pier . . . . .	3,039.25	
Sale of Maps . . . . .	120.91	
Use of Plymouth State Pier . . . . .	89.17	53,647.34

Income  
WATER  
Set  
Two



(8th. 2)

Improvement of Rivers and Harbors Trust  
(Sections 11, 29 Chapter 91, General Laws)

Contributions from towns, individuals or others ..... \$ 86,600.00

Highway Trust  
(Section 30, Chapter 81, General Laws)

Federal Aid (reimbursement from United States Government) ..... 3,422,594.75

Funds contributed for Work under Special Acts  
 Contributions (Chapter 433 Acts 1936) Central Bridge Lowell:

City of Lowell	\$5,000.00	
County of Middlesex	5,000.00	
Federal Aid-PWA 1361D	88,750.00	98,750.00

Contribution by County of Dukes-Chapter 464 Class 2 Acts of 1935... 1,214.96  
 (Edgartown-Oak Bluffs)

Contribution by Federal Government-PWA Docket-1286D-Hull ..... 16,715.00

Total ..... \$32,626,172.03

EXPENDITURES

The expenditures by the Department under the provisions of General Laws and other acts and the appropriation acts, chapters 356 and 497, Acts of 1938, during the fiscal year ending November 30, 1938 were as follows:

Administrative

Commissioner, Associate Commissioners, Personal Services of clerks, stenographers, and Commissioners' Travel .....	\$29,982.20	
Public Works Building, operation and maintenance..	131,634.71	
"Bedford" " expenses	249,853.63	
"" " " Personal services	81,781.08	
Salaries of Guards .....	32,067.52	
Telephone Service .....	24,805.40	\$ 218,489.83

CONSTRUCTION OF TOWN AND COUNTY BRIDGES

(Section 34, Chapter 90, G. L.)

State's expenditures for work contracted for  
 in cities and towns

PWA Docket-Hull	1,809,631.73
Glades Ferry Bridge	42,990.29
Engineering and expense (supervision)	191,103.24
High-Testing Laboratory	612,541.18
Inspection Bituminous concrete pavement	10,007.45
	2,718,435.79



November 30, 1938

Sheet 3

RELATING TO HIGHWAYSPERSONAL SERVICES--Chief Engineer, Clerks and stenographers

98,683.57

State Highways--Construction (Chapter 81, G. L.)

General contract work	2,502,392.64
Engineering (supervision)	802,558.10
Laboratory	7,094.31
Route Maps	1,132.62
Geodetic survey	111.95
U. S. Highway Planning survey	115,865.63
Planning survey (materials)	2,588.79
Fore River Bridge:	
Substructure	8,360.00
Superstructure	13,311.52

21,671.52 3,453,415.56

MAINTENANCE AND REPAIR OF STATE HIGHWAYS(Chapter 81, General Laws)ORDINARY MAINTENANCE

General Maintenance	1,200,118.07
Engineering supervision	299,965.11
Flood Maintenance	449,302.32
Engineering supervision	22,405.94
Highway Testing Laboratory	13,028.14
Machinery and Motor Vehicles	796,765.43
Removal of snow from highways	1,251,990.01
Road planting and development	55,767.80
Traffic engineering signs, and traffic count	236,287.15
Paint manufacture	25,341.48
Newburyport Bridge, Salisbury, Newburyport, over Merrimac river, maintenance and operation	7,554.19
Brightman St. Bridge, Fall River-Somerset, maintenance and operation	15,104.14
New Bedford-Fairhaven Bridge, Acushnet River, maintenance and operation	16,451.70
Slades Ferry Bridge, Fall River, Somerset and Swansea, operation and maintenance	2,494.81
Quincy-Weymouth Bridge, maintenance and operation	20,441.95
Detour and route maps	580.22
Geodetic survey	3,697.48
Tractor repairs	14,241.76
Technical services	361.25

4,431,898.95

CONSTRUCTION OF TOWN AND COUNTY WAYS

(Section 34, Chapter 90, G. L.)

State's expenditures for work contracted for in cities and towns

PWA Docket-Hull	1,809,631.73
Slades Ferry Bridge	42,990.39
Engineering and expense(supervision)	191,189.24
High. Testing Laboratory	642,541.18
Inspection Bituminous concrete pavement	10,927.46
	15,155.79

2,712,435.79

844

Aiding Towns In The Repair And Improvement  
Of Public Ways (Sec. 26, Chapter 81, G.L.)

State's expenditures for work contracted for in cities and towns	1,154,668.55	
Engineering and expense (supervision)	125,816.22	
Highway testing Laboratory	10,308.83	1,290,793.60

<u>Emergency Public Works Construction</u>		81,563.43
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<u>Incidentals, (rental of business machines, printing, postage, supplies, etc.)</u>		16,177.53
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<u>Advertising signs, regulation of personal services and expenses</u>		27,882.51
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SPECIAL ACTS

<u>Abolition of Grade Crossings, (Chapter 417, Acts of 1930)</u>		5,064.17
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<u>Alewife Brook Parkway Extension (Chapter 302 Acts of 1932)</u>		9,143.92
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<u>Reconstruction of Ocean Ave. Revere (Chapters 375, Acts of 1934 and 487 Acts of 1935)</u>		15,433.68
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<u>Certain Land Damages in connection with State Highway Work Chapter 464 Acts of 1935-Bond Issue</u>		80,176.75
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Class 2 Construction of Sidewalks	9,114.08	
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Class 3 Hayden-Cartwright Act	414,562.19	
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Class 4 Grade Crossings, etc.	1,992,798.59	2,416,474.86
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<u>Chapter 186 Acts of 1936 State Highway Flood Damage</u>		10,413.63
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<u>Chapter 429 Acts of 1936-Construction Certain Bridges</u>		541,383.59
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<u>Chapter 433 Acts of 1936-Central Bridge Lowell, PWA Docket 1361D</u>		295,274.35
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<u>Chapter 494 Acts of 1938-Reconstruction and Repair State Highways WPA</u>		186,916.87
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<u>Chapter 498 Acts of 1938-Repairing Storm Damage</u>		191,590.75
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<u>Chapter 505 Acts of 1938-Hurricane and Flood Damage (Bond Issue (A) Town and County Ways)</u>		972,234.06
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<u>Chapter 505 Acts of 1938-Hurricane and Flood Damage (Bond Issue (B) State Highways)</u>		1,543,877.72
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<u>Chapter 500 Acts of 1938 Payments to cities and towns for Highway Work</u>		5,000,000.00
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<u>Chapter 474 Acts of 1938 Reimbursement to Town of Colrain</u>		9,550.05
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<u>Topographical survey and maps</u>		48,431.41
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<u>Suppression of Gypsy and Brown-tail moths on State Highways in cities and towns</u>		12,477.21
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\$23,451,293.96



Shts

## EXPENDITURES RELATING TO THE REGISTRY OF MOTOR VEHICLES

Cost of running the Registry of Motor Vehicles	\$1,605,156.87
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### SUMMARY OF EXPENDITURES BY DEPARTMENT For Year Ending November 30, 1938

Administrative	218,489.83
Relating to Highways	23,451,293.96
Registry of Motor Vehicles	1,605,156.87
Relating to Waterways	1,679,907.01
Total	<hr/> \$26,954,847.67

### CO-OPERATIVE WORK-SUPERVISION OF EXPENDITURES

The Department has supervised the expenditures during the year by cities, towns and counties, under Chapter 81 General Laws, as amended, of approximately \$2,675,889.21 for co-operative work, in repairing, maintaining and improving certain public ways, and for other road work for which the towns and cities made contributions. All such work was carried out in conformity with contracts, specifications and plans approved by the Department.

MEMORANDUM

TO: Comptroller's Bureau, Room 312, State House, attention, Mr. Roche

FROM: Printing Office, Room 410, State House, Boston, Massachusetts

DATE: September 5, 1941

ITEM: Financial Statements for P. D. 54 - Annual Report of the  
Department of Public Works:

Two (2) sets for 1938 - six (6) sheets typewritten ms. to each set

Three (3) sets for 1939 - six (6) sheets photostatic copy to each set

PRINTING OFFICE

A. E. Woodbury

AEW/cm  
Enclosures



RELATING TO REGISTRY OF MOTOR VEHICLES

Accident Prevention . . . . .	
Accident Report Letters . . . . .	
Aircraft . . . . .	
Analysis of Court Abstracts received . . . . .	
Branch Offices . . . . .	
Comparative Statement showing Ratio of Yearly Registrations to Death and Injuries; and Suspensions, etc. . . . .	
Eastern Conference of Motor Vehicle Administrators . . . . .	
Examinations for licenses . . . . .	
Expenditures, Analysis of, for the Fiscal Year 1937 . . . . .	
Head Lamps, Tail Lamps and Reflectors . . . . .	
Insurance, Compulsory, Motor Vehicle Liability. . . . .	
Investigations and Prosecutions by Inspectors . . . . .	
Motor Vehicle Deaths, Injuries, Collisions. . . . .	
Motor Vehicle Accidents to Persons . . . . .	
Types of Collisions. . . . .	
Number of Persons Killed and Injured . . . . .	
Motor Vehicle Equipment, Periodic Inspection of . . . . .	
Brakes, Lights and Miscellaneous . . . . .	
School Bus Inspections . . . . .	
Property Damage . . . . .	
Registrations, Licenses, Fees . . . . .	
Expenses of the Registry of Motor Vehicles . . . . .	
Court Fines received by the Treasurer and Receiver General . . . . .	
Motor Vehicle Fees Rebated . . . . .	
Passenger Cars, Commercial Vehicles and Motor Cycles . . . . .	
Receipts, Analysis of. . . . .	
Total Receipts, credited Highway Fund, 1936. . . . .	
Revocations and Suspensions . . . . .	
Safety Work, Publicity for. . . . .	
Used-Car Section . . . . .	
Motor Vehicle Identification . . . . .	
Engine and Serial Numbers . . . . .	
Motor Vehicles Stolen . . . . .	
Reports . . . . .	
Dealers . . . . .	

November 22, 1936. . . . .	
Dennis Shore Protection. . . . .	
Yarmouth Dredging. . . . .	
Yarmouth Harbor. . . . .	
Yarmouth Shore Protection. . . . .	
Department Works. . . . .	
Federal Appropriations and Expenditures in 1936. . . . .	
Rivers and Harbors to 1935. . . . .	
Flood and Hurricane Emergency Work. . . . .	
Athol, -Millers River. . . . .	
Carrs, -Ware River. . . . .	
East Brookfield, -Lake Umbagog. . . . .	
Erving and Montague, -Millers River. . . . .	
Orange, -Grande Brook. . . . .	
Royalston, -Ottawa River. . . . .	
Ware, -Ware River. . . . .	
Warren, -Quebec River. . . . .	
Winchendon, -Millers River. . . . .	

Barnstable Dredging.....	
Hyannis Harbor.....	
Hyannisport.....	
Maraspin Creek and Barnstable Harbor.....	
West Bay and Cotuit Harbor.....	
Barnstable Shore Protection.....	
Cotuit Shore.....	
East Bay.....	
South Hyannis.....	
West Beach, Squaw Island Road.....	
Boston Harbor.....	
Commonwealth Flats at East Boston.....	
Aircraft Landing Field-Boston Airport.....	
Commonwealth Pier 1.....	
Jeffries Point Dredging.....	
Reclamation of Flats.....	
Commonwealth Flats at South Boston.....	
Commonwealth Pier 5.....	
Development of Land South of Summer Street.....	
Castle Island Bulkhead.....	
Hingham Harbor.....	
Hull Shore,-Pemberton Sea Wall.....	
Inspection of Structures in Tide Water.....	
Malden River.....	
Marine Borers.....	
Neponset River.....	
Quincy Shore,-Sea Wall at Great Head.....	
Surveys.....	
Weir River, Hull.....	
Brewster Shore Protection.....	
Caleb Pond, Edgartown.....	
Cape Cod Canal Landing Pier.....	
Cape Poge Channel, Edgartown.....	
Connecticut River.....	
Conserving and Equalizing the Flow of Water in Rivers	
and Streams.....	
Contracts Made and in Force during the Year ending	
November 30, 1938.....	
Dennis Shore Protection.....	
Falmouth Dredging.....	
Megansett Harbor.....	
Falmouth Shore Protection.....	
Menauhant Shore.....	
Federal Appropriations and Expenditures in Massachusetts	
Rivers and Harbors to June 30, 1938.....	
Flood and Hurricane Emergency Work.....	
Athol,-Millers River.....	
Barre,-Ware River.....	
East Brookfield,-Lake Lashaway.....	
Erving and Montague,-Millers River.....	
Orange,-Orcutt Brook.....	
Royalston,-Otter River.....	
Ware,-Ware River.....	
Warren,-Quaboag River.....	
Winchendon,-Millers River.....	



Gloucester Fish Pier.....	.....
Gloucester Shore,-Western Avenue.....	.....
Great Ponds.....	.....
Access to:	
Brush Hill or Three Mile Pond, Sheffield.....	.....
White Pond, Chatham.....	.....
White Pond, Concord.....	.....
Yokum Pond, Becket.....	.....
Surveys.....	.....
Harwich Dredging.....	.....
Allens Harbor.....	.....
Herring River.....	.....
Witchmere Harbor.....	.....
Harwich Shore.....	.....
Herring River.....	.....
Witchmere Harbor.....	.....
Housatonic River, Pittsfield.....	.....
Income, Statement of.....	.....
Ipswich River, Ipswich.....	.....
Licenses and Permits.....	.....
Marine Borers.....	.....
Nantucket Harbor Dredging.....	.....
New Bedford State Pier.....	.....
Oak Bluffs Shore Protection.....	.....
Plymouth, Commonwealth Property.....	.....
Province Lands.....	.....
Provincetown Harbor.....	.....
Provincetown Shore Protection.....	.....
Provincetown Tercentenary Commission.....	.....
Rivers, Harbors, Tide Waters and Foreshores outside of Boston Harbor.....	.....
Roughans Point, Revere.....	.....
Scituate Harbor.....	.....
Scituate Shore Protection.....	.....
Sengekontacket Pond, Oak Bluffs.....	.....
Topographical and Geological Surveys and Map of Massachusetts.....	.....
Town Boundary Lines.....	.....
Triangulation Stations.....	.....
Truro Shore Protection.....	.....
Pilgrim Beach.....	.....
Warrens Cove, Plymouth.....	.....
Wild Harbor, Falmouth.....	.....
Witchmere Harbor, Falmouth.....	.....
Yarmouth Shore Protection.....	.....
Point Gammon.....	.....











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